

June 15, 1937.

A. D. BALDWIN
SLATTED AWNING AND DRAIN
Filed Oct. 16, 1933

2,083,681

2 Sheets-Sheet 1

Fig. 1

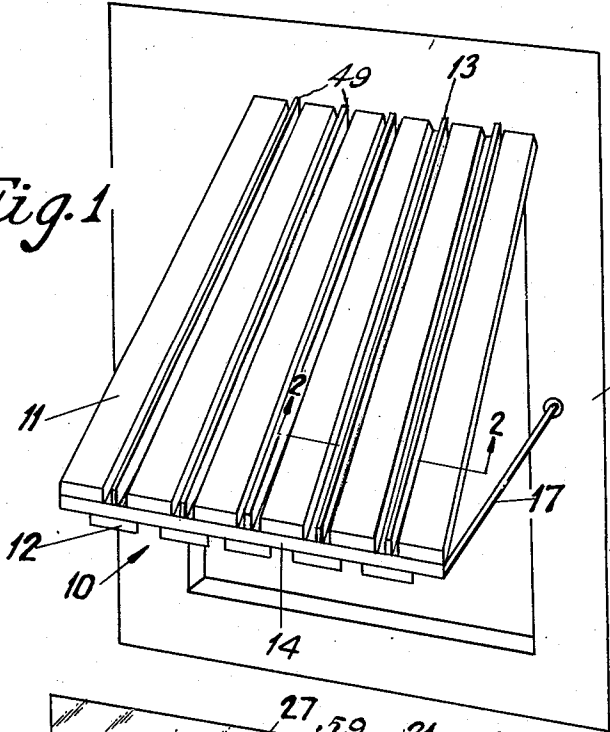


Fig. 2

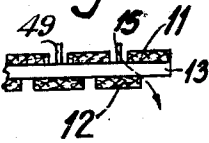


Fig. 3

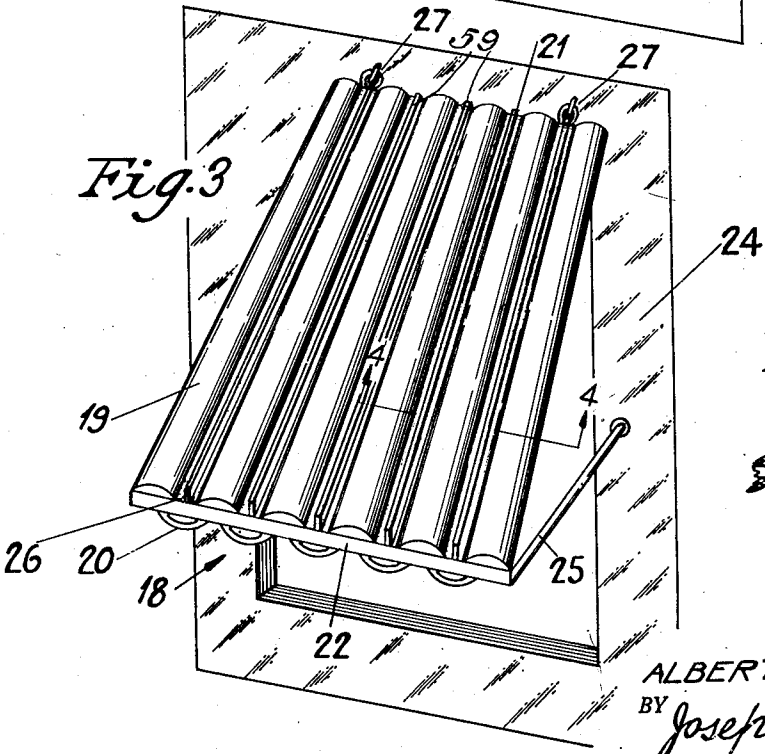
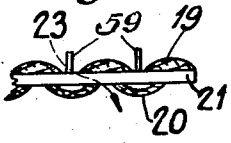


Fig. 4



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Fig. 5

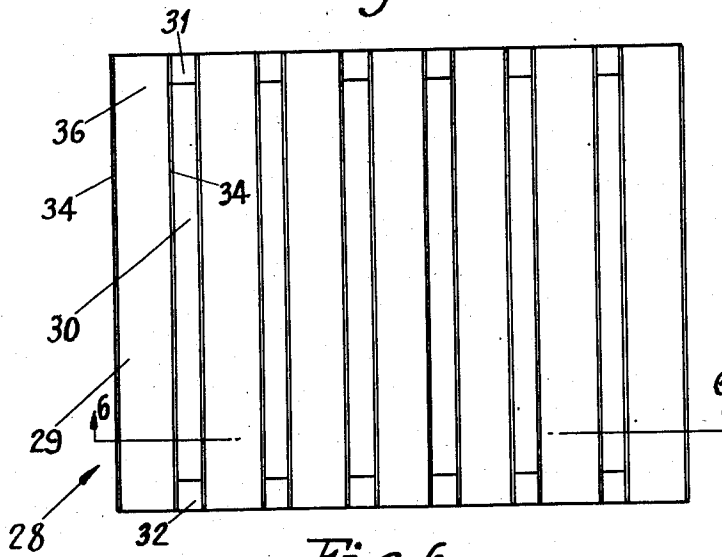
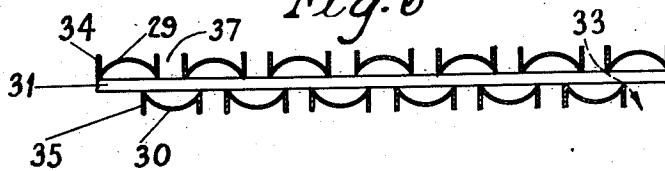


Fig. 6



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SLATTED AWNING AND DRAIN

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Application October 16, 1933, Serial No. 693,709

3 Claims. (Cl. 156—15)

This invention relates to improvements in slatted awnings which permit the passage of light and air therethrough while serving as a shelter from the sun and as a means for draining rain water away from the building wall.

An object of this invention is to provide a slatted awning having two adjacently positioned parallel series of superimposed slats spaced apart horizontally and lying in staggered and overlapping relation, the slats being secured in perpendicular relation to upper and lower rails and forming a rectangular box-like frame designed with bracing for mounting in inclined service position and lengthwise in perpendicular relation to a horizontal plane of a building wall.

Another object of this invention is to provide a slatted awning made of lower slats having an arcuate cross-section and mounted in trough-like position, and a series of upper slats having a segmental cross-section and mounted intermediate the trough-like slats but in convex position so that the trough-like slats will serve to carry all the rain away from the building.

Another object of this invention is to provide a slatted awning having two adjacently positioned series of superimposed slats lying in spaced parallel planes and in staggered and overlapping relation, the awning being provided with bracing for mounting in inclined service position transversely of a building wall, the surfaces of the slats being adapted to reflect light and causing the usual darkened undersurface of an awning to be lightened.

With the above and other objects in view, the invention will be hereinafter more particularly described in connection with the accompanying drawings in which:

Figure 1 is a perspective view of the awning showing the invention as embodied in slats of rectangular form.

Figure 2 is a cross-section, the section being taken as on line 2—2 in Figure 1.

Figure 3 is a perspective view of the awning showing the invention as embodied in slats of arcuate form.

Figure 4 is a cross-section, the section being taken as on line 4—4 in Figure 3.

Figure 5 is a plan view of a modified form of slatted awning and shows the invention as embodied in ribbon-like slats of arcuate form and made of metal.

Figure 6 is a cross-section, the section being taken as on line 6—6 in Figure 5.

In the illustrated embodiment of the invention, Figure 1 shows a slatted awning 10 built up of an

adjacently positioned parallel series of upper slats 11 having a rectangular cross-section and an adjacently positioned parallel series of lower slats 12 of rectangular cross-section. The upper and lower slats are secured in perpendicular relation to an upper rail 13 and a lower rail 14 and together form a slatted frame which is adapted to function as an awning. The upper and lower slats are spaced apart horizontally a distance equal to the height of the rails 13 and 14 and are positioned in staggered and overlapping relation and form horizontal air passages there-between. The passages permit light and air to pass to the undersurface of the awning, as best shown by the numeral 15 and by the dotted line in Figure 2. The awning 10 is designed to be positioned lengthwise in perpendicular relation to a horizontal plane of a building wall 16 and may be fastened in an inclined service position to the wall by means of bracing 17.

As shown in Figure 3, there has been provided a modified form of slatted awning 18 built up of an adjacently positioned parallel series of upper slats 19 having a segmental cross-section and an adjacently positioned parallel series of lower slats 20 having an arcuate cross-section and mounted in trough-like position. The upper and lower slats are secured in perpendicular relation to an upper rail 21 and a lower rail 22 and together form a slatted frame adapted to function as an awning the same as the frame shown in Figure 10. The upper and lower slats are positioned in staggered and overlapping relation and form passages there-between which permit light and air to pass to the undersurface of the awning, as best shown by the numeral 23 and by the dotted line in Figure 4. The awning 18 is positioned lengthwise in perpendicular relation to a horizontal plane of the building wall 24 and is fastened in inclined service position to the wall by means of bracing 25. The trough-like slats 20 form drain channels extending from the upper endwise face to the lower endwise face and serve to carry all the rain deposited therein away from the building wall 24 and out through the endwise face at the lower elevation.

The awnings identified by the numerals 10 and 18 are more economically built of wood. The slats are nailed to the upper and lower rails and form a rigid structure. Referring to Figure 3, it will be readily seen that the breadth of a trough-shaped slat 20 is larger than a space 26 between the upper slats 19. This space will allow free circulation of air both vertically and laterally and thereby prevent the accumulation or con-

centration of heated air beneath the awning. The awnings may be suspended at any desired angle in relation to a wall from hangers 27 or in any other well known way. In the case of a terrace, without an abutting wall, the structure may be suspended from or supported by a frame erected for that purpose.

As shown in Figure 5, there has been provided a modified form of slatted awning 28, built up of long strips of spring metal rolled to assume an arcuate cross-section. The metal may be spring bronze for superior installations. For average installations, I may use ribbon-like steel strips rolled into a concavo-convex cross section with side flanges for stiffness. The awning 28 comprises an adjacently positioned parallel series of upper slats 29 of arcuate cross-section and mounted in convex relation and an adjacently positioned parallel series of lower slats 30 of arcuate cross-section and mounted in concave or trough-like position. The upper and lower slats are secured in perpendicular relation to an end rail 31 and an end rail 32 and together form a rigid metal frame. The rails 31 and 32 are preferably of hollow rectangular cross-section. The upper and lower slats are positioned in staggered and overlapping relation and form passages there-between which permit light and air to pass to the undersurface of the awning as shown by the numeral 33 and by the dotted line in Figure 6. The upper slats 29 are provided with side flanges 34 and the lower slats 30 are provided with side flanges 35 serving as stiffeners which augment the rigidity of the awning 28. The flanges 34 of the upper slats 29 also serve to form channels 36 to carry rain deposited therein away from the building. I may fasten the upper and lower metal slats to the metal end rails 31 and 32 by soldering or by electric spot welding.

As the undersurface of an awning is much darker than the exterior surface which is exposed to the sun, I intend to provide the curved slats of my awnings with a light-reflecting coating which will receive the light through the space 37 between any two of the upper slats 29 and reflect the light to the interior concave surfaces of the upper slats 34 and cause the undersurface of my slatted awning to be made lighter with a diffused light.

It is to be noted that in all the embodiments herewith shown, the slats are positioned lengthwise in perpendicular relation to a horizontal plane of a building wall and in inclined position to the wall. The perpendicular position of

the slats to the wall makes it possible to quickly drain the rain away from the wall and far removed therefrom and maintains the wall in a relatively dry condition. This perpendicular position is contrary to the position heretofore given to blind-slats which are placed parallel to the building wall.

As shown in Figures 1 and 2, the awning 10 has upright fins 49 spaced between the upper slats 11 and secured to the cross rails 14. The fins 49 preferably extend to a level slightly above the upper slats. The object of the fins is to prevent sunlight of full intensity from passing to the undersurface of the awning through the spaces between the upper and lower slats when the rays of sunlight strike the slats at a sharp angle, a condition that exists in the morning and afternoon.

Figures 3 and 4 show upright fins 59 spaced between the upper slats 19 and secured to the cross rails 21. The fins 59 preferably extend to a level slightly above the upper slats.

It is to be noted that one or more additional rails may be inserted intermediate the two end rails herewith shown in all the modifications, and that other minor changes may be made by those skilled in the art.

Having thus described my invention, what I claim is:

1. In a slatted awning comprising end rails and an upper and lower series of parallel slats, said slats being spaced apart and fastened in right-angular relation with said rails, said upper series of slats being in staggered and overlapping relation with said lower series and forming lateral passageways therebetween, and upright fins secured to said rails and extending above and intermediate said upper slats to prevent glaring rays of sunlight intensity from passing to the undersurface of said awning.

2. In a slatted awning comprising an upper and lower series of parallel slats spaced apart and fastened in staggered and overlapping relation and forming passageways therebetween, and upright members extending above said upper slats to prevent sunlight of full intensity from passing to the under surface of said awning, through said passageways.

3. The invention as defined in claim 2 wherein each lower slat has a channel extending sideways sufficiently so as to underlay the two adjacent edge portions of two upper slats.

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