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S. B. ASHTON ET AL

2,824,341

AWNING

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3 Sheets-Sheet 1

Fig. 1.

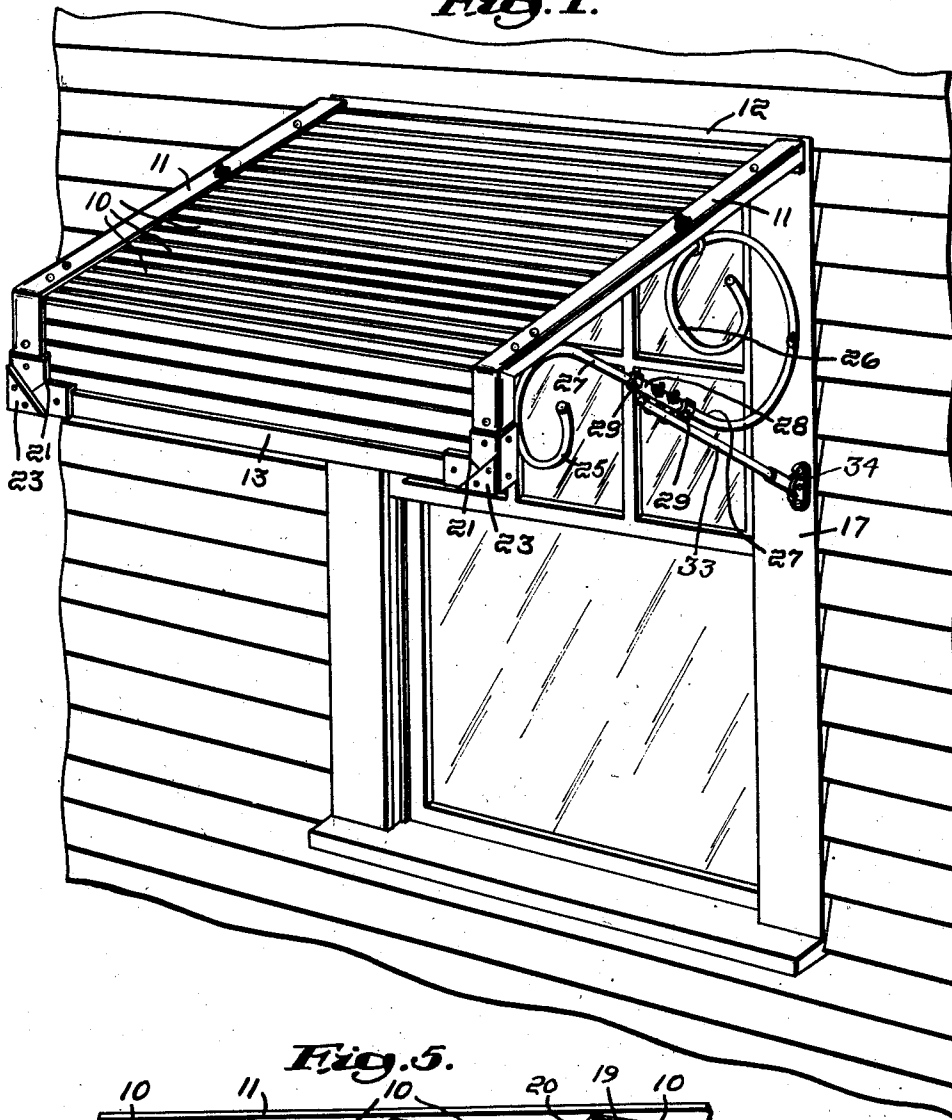


Fig. 5.

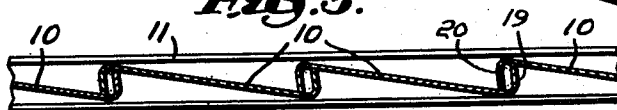
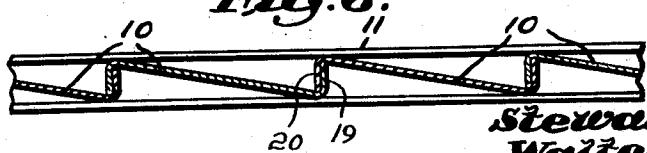


Fig. 6.



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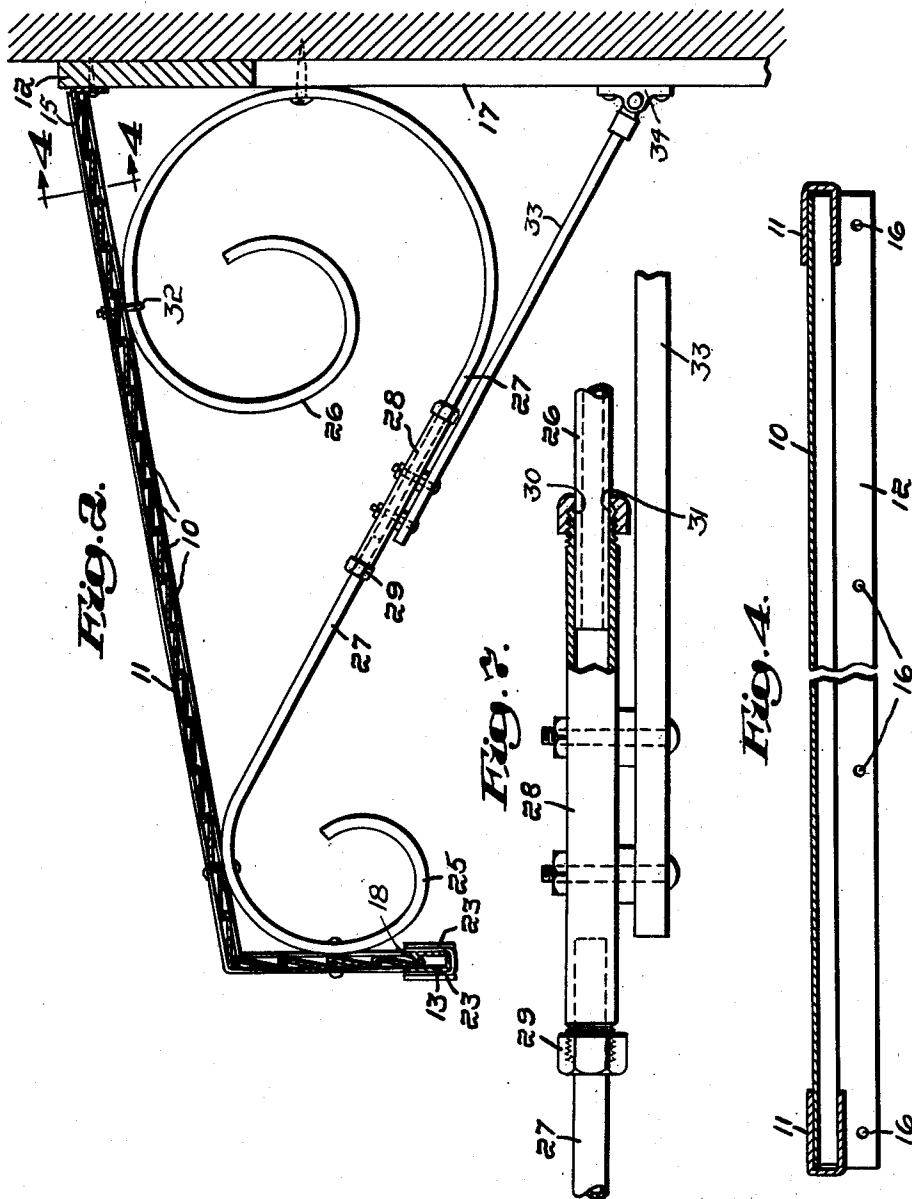
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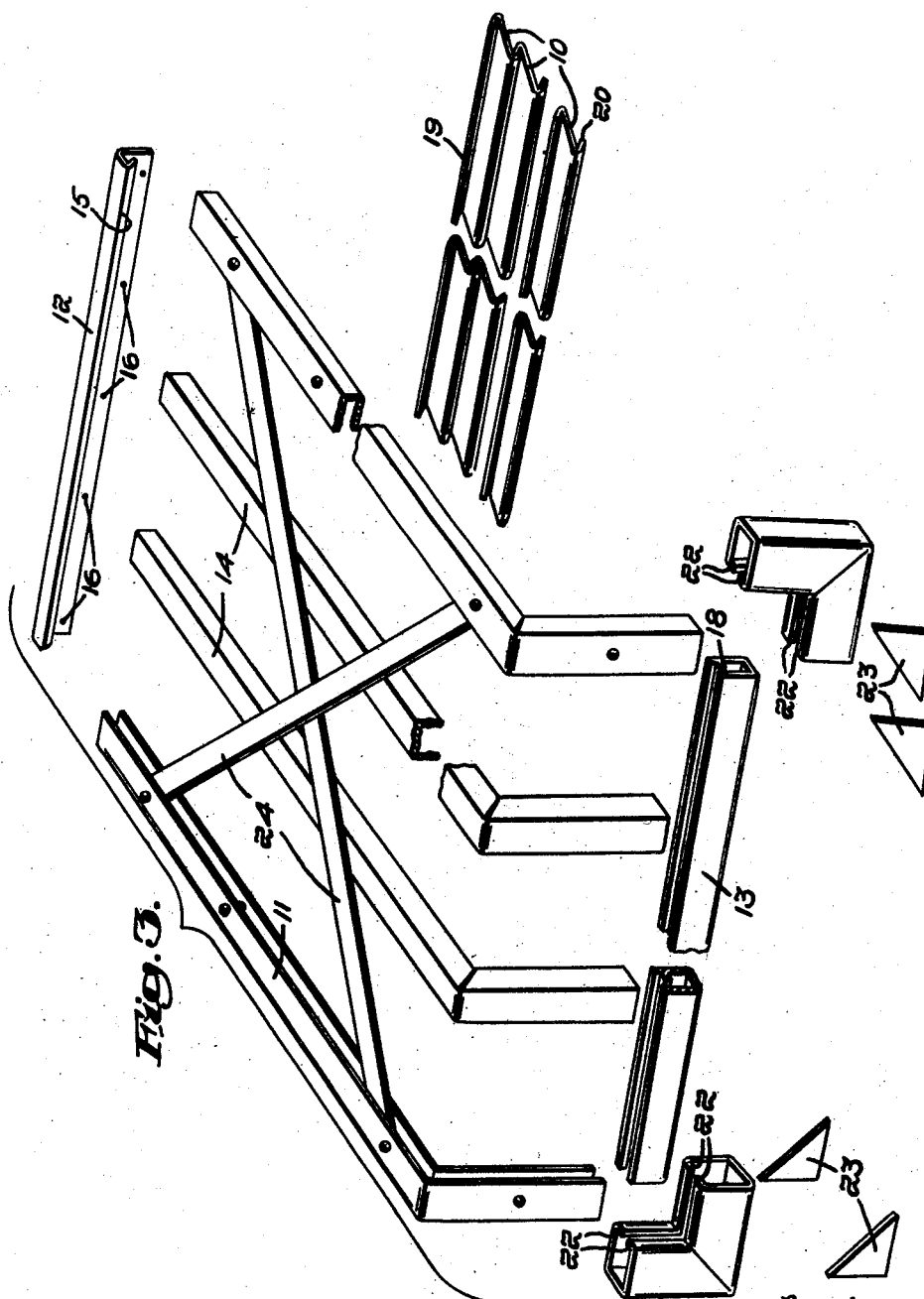
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AWNING

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3 Sheets-Sheet 3



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AWNING

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5 Claims. (Cl. 20—57.5)

This invention relates to metal awnings and the like. The protection against the weather of doors not shielded by a porch and of windows is commonly effected by means of awnings, each consisting of canvas carried by a suitable supporting frame. As canvas weathers and is not adapted for year round use, metal awnings have been made available. While these withstand the weather, they have proved objectionable as being considerably more costly and less adaptable in use than the canvas awnings they were to replace.

The general objective of the present invention is to provide attractive metal awnings that are acceptable as to price and at the same time are adaptable to the various requirements of installation and use. These objectives are attained by providing slats of approximately Z-shaped section thus to enable a plurality of them to be assembled by interengagement of their marginal flanges. Such an assembly is unified by a frame which holds the slats in position.

In the accompanying drawings, there is shown an illustrative embodiment of the invention from which these and other of its objectives, novel features, and advantages will be readily apparent.

In the drawings:

Fig. 1 is a view, in perspective, of an installed awning in accordance with the invention.

Fig. 2 is a section, on an enlarged scale, transversely of the slats.

Fig. 3 is an exploded and partly sectioned view of the parts.

Fig. 4 is a section, on a further increased scale, taken along the indicated lines 4—4 of Fig. 2.

Fig. 5 is a fragmentary view illustrating the assembly of the slats in a side member.

Fig. 6 is a similar view showing the relationship between the slats and the side members in the completed awning, and

Fig. 7 is a fragmentary and partly sectioned view of the adjustable connection between the scrolls.

In accordance with the invention, an awning consists of a plurality of slats 10 assembled in a suitable frame made up from side members 11 and end members 12 and 13. One or more reinforcing members 14 may also be employed to interconnect the end members 12 and 13.

The side members 11 are of U-shaped section and are disposed with their channels opening towards each other. The end member 12 is of L-shaped section with one part provided with a depending rib 15 and the other part provided with screw holes 16 to enable it to be secured to the upper part of the window casing 17. The ribbed portion of the end member 12 is dimensioned for entry into the channels of the side members 11 to enable these members to be bolted or riveted together. The member 13 is also of U-shaped section, but is dimensioned to fit between the side members 11 and has an inturned rib 18 disposed in a direction opposite to that of the rib 15.

While the frame as thus far described is not complete,

reference is now made to the slats 10. Each of these is approximately Z-shaped in cross section and thus has oppositely disposed flanges 19 and 20. These flanges are preferably parallel and inclined slightly towards each other as may best be seen in Figs. 5 and 6. A plurality of slats are employed in each awning with their ends slidably entrant of the channels of the side members 11. The flange 19 of the slat 10 proximate the end member 12 is caught by the rib 15 thereof and its flange 20 and the flange 19 of the next slat 10 are interengaged. The slats are all similarly marginally connected and the last one of the assembly has its flange 20 caught by the rib 18 of the end member 13.

In practice, the slats 10 are formed of resilient stock and they are so dimensioned as to enable them to fit freely within the channels of the side members 12 as shown in Fig. 5. When, however, the assembled slats are pulled taut, the flanges yield sufficiently to become tightly engaged and to be so straightened as to bind in said channels, as is illustrated by Fig. 6, with such binding assisting in the holding of the slats in desired relation to each other. The frame is then completed by the addition of the corners 21.

The corners 21 are preferably formed from predetermined lengths of channel stock having inturned flanges 22 and dimensioned to slidably receive and confine the ends of the members 11 and 13. To complete the corners, a triangular piece 23 is cut from the middle of the sides of each such length to enable such lengths to be bent to form a right angle. The pieces 23 are then fastened as by rivets as corner reinforcements as shown in Fig. 1. The corners 21 and the received ends of the members 11 and 13 are then interconnected by rivets or bolts.

The reinforcing members 14 are formed of U-shaped stock and have their ends secured to the ribbed portion of the end member 12 and the under surface of the end member 13. In practice, crossed braces 24 interconnect the side members 11 to stiffen the frame. These have their extremities within and anchored to the channels of the side member 11.

It is usual for an awning to have a drop. This may be provided, as will be apparent from Fig. 3, by mitering the side members 11 and the reinforcements 14 to enable them to be bent to the desired extent.

While the completed awning may be variously supported, the means for so doing that are detailed in the drawings are preferred because they combine attractive appearance with adaptability to a wide range of installation requirements.

Such means consist of a pair of scrolls 25 and 26 of different size with each having a straight portion 27 dimensioned to slidably enter the sleeve 28. Threaded on the ends of the sleeve 28 are glands 29 each having a tapered internal shoulder 30 operable to engage and contract a split wedge ring 31 against a scroll portion 27 thus to lock it in a selected position. It will be apparent that the pitch of the awning may be varied within predetermined limits by varying the relative position of the scrolls 25 and 26. The scrolls 25 and 26 are bolted to the side members 11. In the case of the scrolls 26, eye bolts are used with their eyes 32 being slidable along the scrolls 26 as required by the established pitch of the awning. The scrolls 26 are also attached to the casing 17 and rigidly secured to each sleeve 28 is an arm 33 to whose free end is attached a pivotable bracket 34 to be secured to the window casing.

From the foregoing, it will be apparent that awnings in accordance with the invention are well adapted to meet all the requirements of production, installation, and service.

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What we therefore claim and desire to secure by Letters Patent are:

1. An awning comprising a plurality of slats of resilient stock, each of approximately Z-shaped section thus to have a main part and oppositely disposed marginal flanges inclined towards each other, said slats being assembled side by side with their proximate flanges interengaged, and a frame for said slats supporting them against relative movement with said interengaged flanges under tension said frame having opposed channels in which the ends of said slats are lodged.

2. An awning comprising a plurality of resilient stock slats, each of approximately Z-shaped section thus to have a main part and oppositely disposed marginal flanges inclined towards each other, said slats being assembled side by side with their proximate flanges interengaged, and a frame for said slats whose sides are channels confining the ends thereof and to each of whose ends the proximate flange of a slat at the corresponding end of the assembly is caught, said flanges being tensioned and binding in said channels.

3. An awning comprising a plurality of slats of resilient stock, each of approximately Z-shaped section thus to have a main part and oppositely disposed marginal flanges inclined towards each other, said slats being assembled side by side with their proximate flanges interengaged, and a frame for said slats whose sides are opposed channels confine the ends thereof and whose ends include ribs, said ribs being disposed for engagement by the exposed flanges of the slats at the end of said assembly, and when thus engaged, said flanges being tensioned and binding in said channels.

4. An awning comprising a plurality of slats of resilient stock, each of approximately Z-shaped section thus to have a main part and oppositely disposed marginal flanges inclined towards each other, said slats being assembled side by side with their proximate flanges interengaged, and a frame for said slats, said frame including side members each having a channel receiving the ends of said slats, and a first end member including a rib to

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which the free flange of the proximate slat is caught and which interconnects said side members at one end thereof, a second end member including a rib to which the free flange of the slat proximate thereto is caught, said second end member being of a length to fit between said side members, and corners interconnecting said second end member to the other ends of said side members with said flanges being under tension and binding in said channels.

5. An awning comprising a plurality of slats of approximately Z-shaped section thus to have oppositely disposed marginal flanges which are parallel and inclined towards each other, said slats being assembled side by side with their proximate flanges interengaged, and a frame for said assembled slats, said frame including side members having channels extending from end-to-end thereof to receive the ends of said slats, said slats being of resilient stock and their height being slightly less than the width of said channels, said frame also including frame members to which the respective flanges at the ends of the slat assembly are caught, said slats being under tension in the frame with their flanges so flexed as to bind in said channels.

References Cited in the file of this patent

UNITED STATES PATENTS

500,741	Giessenbier	July 4, 1893
785,435	Powell	Mar. 21, 1905
951,867	Wilson	Mar. 15, 1910
1,030,493	Sorenson	June 25, 1912
1,244,215	Lancaster	Oct. 23, 1917
2,070,144	Staley	Feb. 9, 1937
2,145,569	Jones	Jan. 31, 1939
2,242,697	Duca	May 20, 1941
2,244,012	Johnson	June 3, 1941
2,504,771	West	Apr. 18, 1950
2,570,018	Williamson	Oct. 2, 1951
2,655,697	Albany	Oct. 20, 1953
2,681,482	Heirich	June 22, 1954