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AWNINGS

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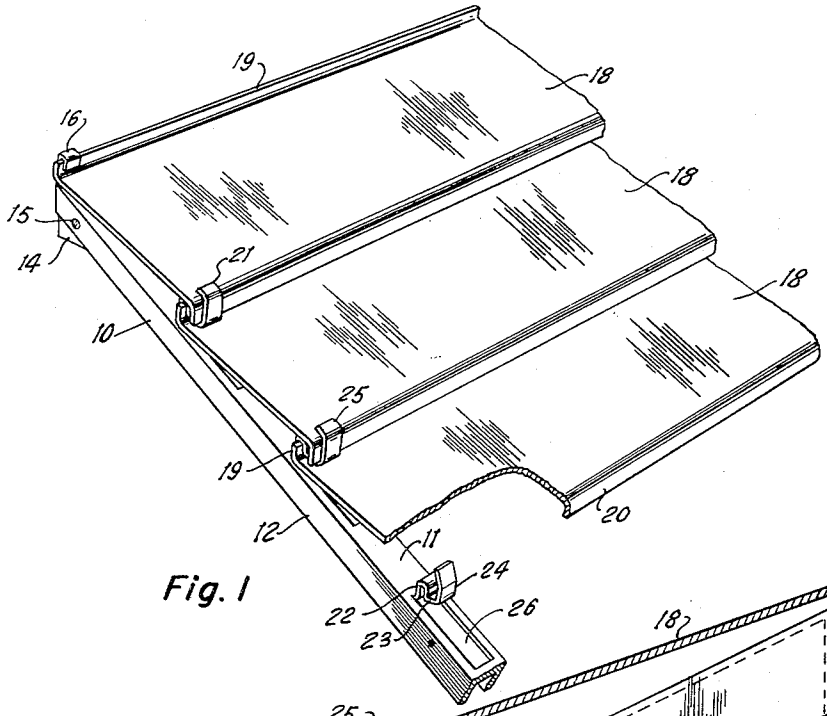


Fig. 1

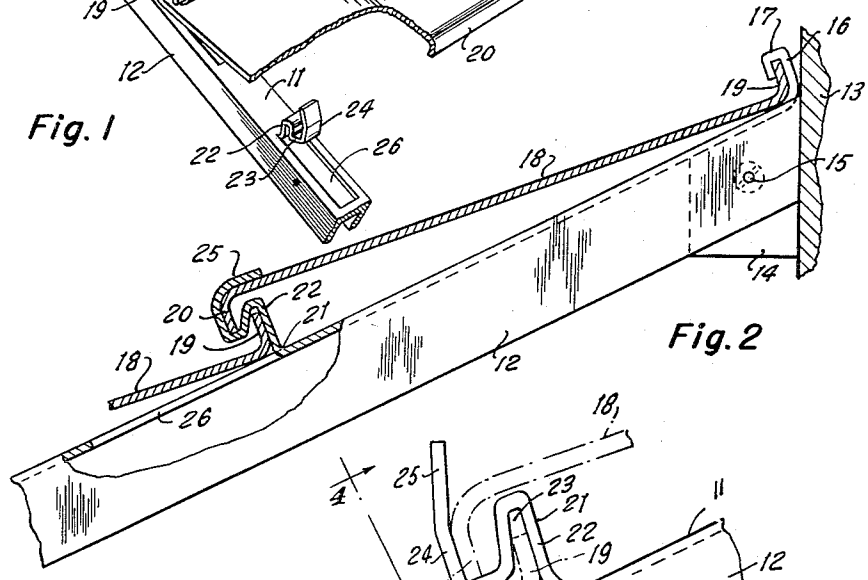


Fig. 2

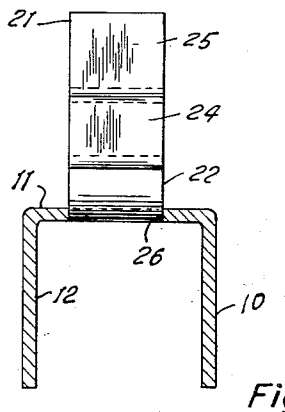


Fig. 4

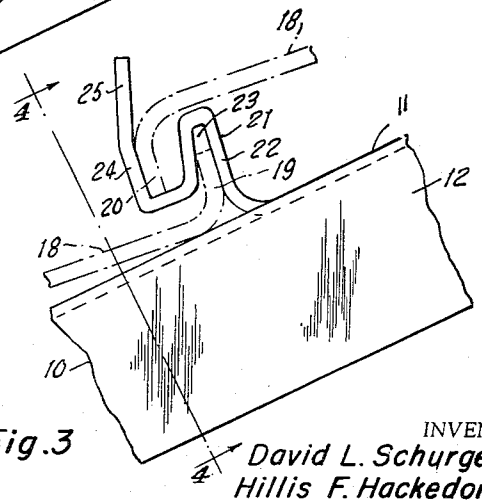


Fig. 3

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AWNINGS

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4 Claims. (Cl. 20—57.5)

This invention relates to new and useful improvements in awnings.

One object of the invention is to provide an improved awning of the type having inclined supports and separate transverse panels mounted on the supports in overlapping spaced relation to permit the passage of air and light therebetween.

Another object of the invention is to provide an improved awning having brackets upset from supporting bars and bent to form means for confining the overlapping margins of transverse panels whereby said panels may be secured on the supports without the use of bolts or separate fastenings.

A further object of the invention is to provide an improved awning having overlapping flanged panels spaced apart to permit ventilation with their flanged edge portions engaged in angular brackets made integral with supporting bars and having reverse bends, the free end of each bracket being bent downwardly upon the overlying panel to secure the panels in place.

A construction designed to carry out the invention will be hereinafter described together with other features of the invention.

The invention will be more readily understood from a reading of the following specification and by reference to the accompanying drawing, wherein an example of the invention is shown, and wherein:

Fig. 1 is a perspective view of one end portion of an awning constructed in accordance with the invention, a portion of one of the panels being broken away to show the support,

Fig. 2 is an enlarged, transverse, vertical, sectional view of the awning attached to a building wall or frame,

Fig. 3 is an enlarged, side elevational view showing one of the brackets prior to bending thereof, and

Fig. 4 is a vertical, sectional view, taken on the line 4—4 of Fig. 3.

In the drawing, the numeral **10** designates an inclined support or channel bar of an awning formed of aluminum or other suitable metal and being inverted with a flat top web **11** and depending flat flanges or sides **12**. A typical awning includes channel bars at its ends and intermedial channel bars (not shown) may be used in large awnings. Each bar has its upper end mounted at the top of a window or door frame or the wall **13** surrounding the same by an inverted channel-shaped bracket **14** suitably secured to the frame or wall and telescoping said bar. A screw or other fastening **15** may be employed to secure the overlapping flanges **12** of the bar to the bracket. An upstanding angular bracket or clip **16** is cut from the web **11** upon itself and bent so as to extend upwardly to the face of the frame or wall **13** and outwardly therefrom to provide an overhanging, inverted bill or flange **17**, angular in cross-section. The body of the clip **16** is disposed at substantially a right angle to the web **11**.

A plurality of transverse panels **18**, of plastic reinforced by glass fibers or other suitable material, preferably translucent, are adapted to extend across the awning in overlapping spaced relation. Each panel is substantially flat and has an upturned top flange **19** at its upper longitudinal margin and a downturned bottom flange **20** at its lower longitudinal edge portion, the flanges being at substantially right angles to the plane of the panel. The top flange **19** of the uppermost panel is snugly engaged in the clips **16** of the bars **10** and the upper transverse edge portion of said panel rests upon the web **11** of said bars.

A plurality of brackets **21** are struck or bent upwardly from the web in equally spaced relation and are formed by cutting or stamping tongues from said web. As shown in Fig. 3, each tongue is bent upwardly from the web and downwardly upon itself to form an inverted bend or loop **22** which has a downwardly flaring throat **23**. The upturned flange **19** of the adjacent, underlying panel **18** is adapted to be wedged in the throat **23** so as to secure its upper edge portion to the channel bar. The free end of the bracket **21** is bent upwardly and outwardly from the overhanging lower end of the loop **22** to provide a U-shaped hanger **24** forming an upwardly-directed throat or socket for receiving the downturned flange **20** of the uppermost panel. This flange rests against the upturned leg of the hanger and the free end or lip **25** of said leg is bent downwardly on top of the panel to secure its lower edge portion in place. As a result, the lower edge portion of the uppermost panel is elevated and overhangs the top flange of the adjacent panel. The other panels are mounted and fastened in the same manner with each bracket **21** confining the overlapping edge portions of adjacent panels.

It is noted that the brackets **21** overlie openings **26** provided in the webs by the cutting of the tongues and that the openings accommodate the passage and facilitate the coaction of dies (not shown) for forming said brackets. The channel bar **10** may be suitably supported from a building wall at any desired inclination. The mounting and securing of the panels is simple and relatively economical and at the same time provides a strong and compact structure. It is pointed out that the panels are tightly secured to the channel bars without the use of bolts or other detachable fastenings. Further, due to the fact that the overhanging flanges **20** are spaced from the underlying flanges **19**, transverse ventilating openings are provided between the panels.

The foregoing description of the invention is explanatory thereof and various changes in the size, shape and materials, as well as in the details of the illustrated construction may be made, within the scope of the appended claims, without departing from the spirit of the invention.

What we claim and desire to secure by Letters Patent is:

1. An awning including an elongated support, upstanding brackets on the support, each bracket being bent upon itself continuously into a downwardly-flaring throat and an upwardly-directed throat which overlap vertically of the bracket, and panels extending transversely of said support, each panel having upturned and downturned flanges at its longitudinal edge portions, the upturned flange of one panel being confined in the downwardly-flared throat of one of the brackets and the downturned flange of an adjacent panel being confined in the upwardly-directed throat of said bracket, whereby the flanges of adjacent panels overlap transversely of said bracket and are closely spaced to provide a sinuous passage for the flow of air currents between said flanges and to prevent a direct entrance of air therebetween.

2. An awning including an elongated support, upstanding brackets on the support, each bracket being bent upon itself continuously into a downwardly-flaring throat

and an upwardly-directed throat which overlap vertically of the bracket, a lip at the outer upper end of each bracket, and panels extending transversely of said support, each panel having upturned and downturned flanges at its longitudinal edge portions, the upturned flange of one panel being confined in the downwardly-flared throat of one of the brackets and the downturned flange of an adjacent panel being confined in the upwardly-directed throat of said bracket, whereby the longitudinal edge portions and flanges of adjacent panels overlap transversely of said bracket and are closely spaced to provide a sinuous entrance for the flow of air currents between said flanges and to prevent a direct entrance of air therebetween, the lip being bent downwardly upon the overlying edge portion of the overlapping panel to confine its downturned flange in said upwardly-directed throat.

3. An awning including an elongated support having a top, upstanding brackets struck upwardly from the top of the support, each bracket being bent upon itself continuously into a downwardly-flaring throat and an upwardly-directed throat which overlap vertically of the bracket, and panels mounted transversely on said support, each panel having upturned and downturned flanges at its longitudinal edge portions, the upturned flange of one panel being confined in the downwardly-flared throat of one of the brackets and the downturned flange of an adjacent panel being confined in the upwardly-directed throat of said bracket, whereby the flanges of adjacent panels overlap transversely of said bracket and are closely spaced to provide a sinuous entrance for the flow of air currents between said flanges and to prevent a direct entrance of air therebetween.

4. An awning including an elongate support, upstanding brackets on the support, each bracket being bent upon itself continuously into a downwardly-flaring throat and an upwardly-directed throat which overlap vertically of the bracket, and panels mounted transversely on said support, each panel having upturned and downturned flanges at its longitudinal edge portions, the upturned flange of one panel being wedged in the downwardly-flared throat of one of the brackets and the downturned flange of an adjacent panel being confined in the upwardly-directed throat of said bracket, whereby the flanges of adjacent panels overlap transversely of said bracket and are spaced apart to permit a sinuous entrance for the flow of air currents between the flanges and to prevent a direct entrance of air between the panels.

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