March 27, 1951 J. J. CICIARELLI 2,546,386

DEMOUNTABLE AWNING

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Fig. 1.

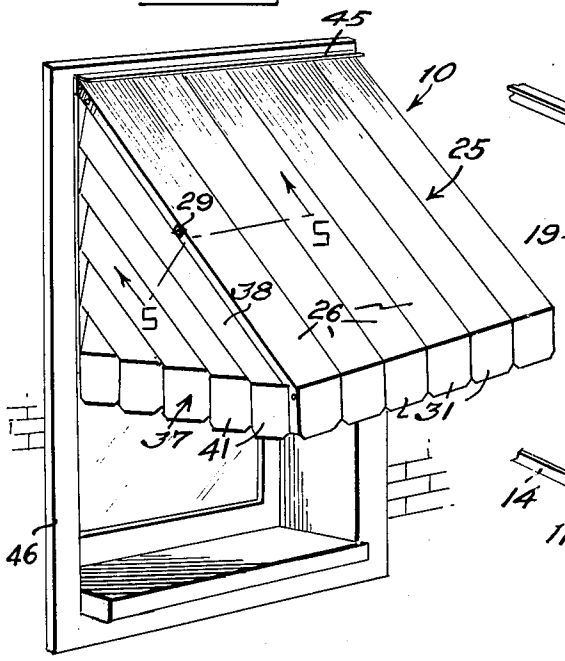


Fig. 3.

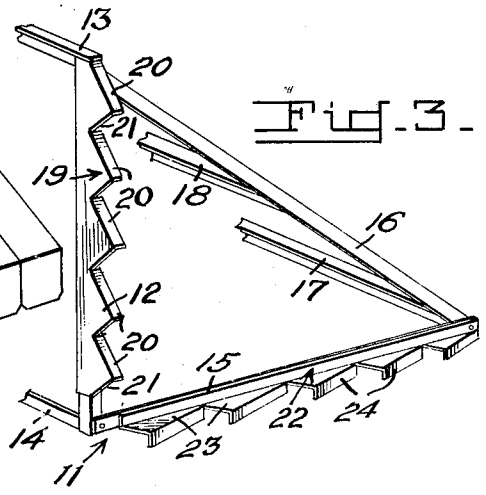


Fig. 4.

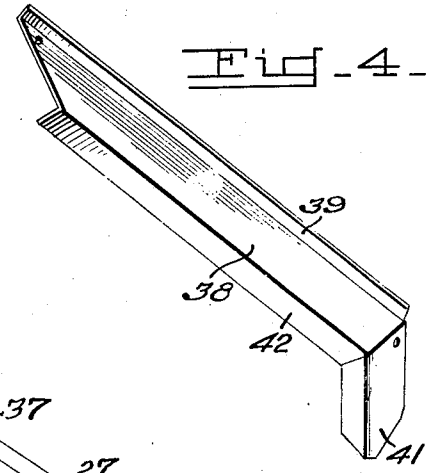
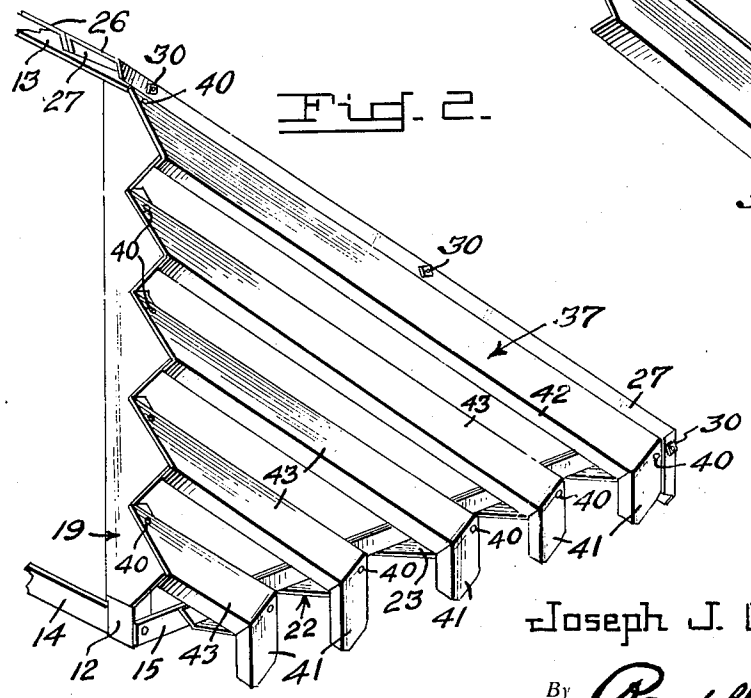


Fig. 2.



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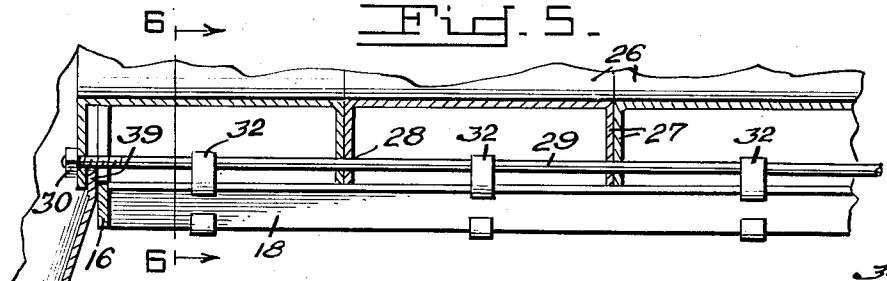
Attorney

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DEMOUNTABLE AWNING

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Fig. 5.



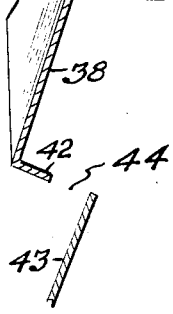
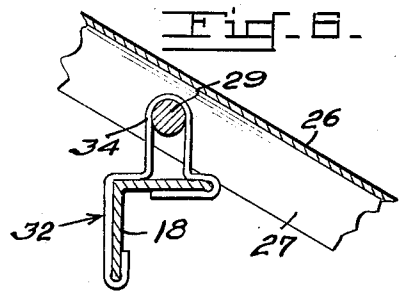


Fig. 6.



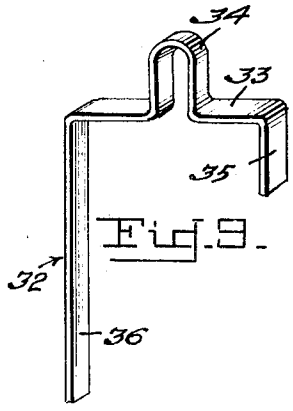


Fig. 9.

Fig. 7.

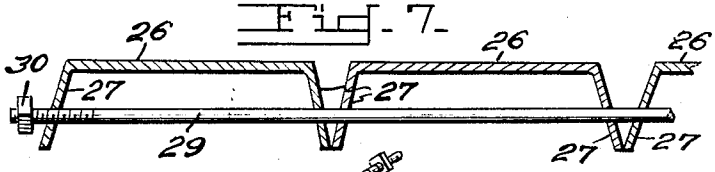
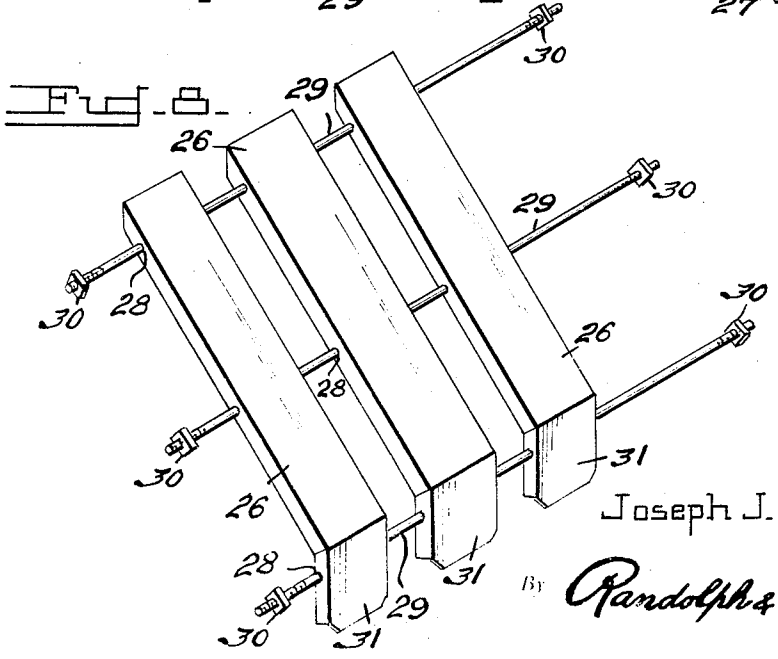


Fig. 8.



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UNITED STATES PATENT OFFICE

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DEMOUNTABLE AWNING

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Application October 17, 1947, Serial No. 780,365

2 Claims. (Cl. 20—57.5)

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This invention relates to a readily demountable awning for windows, porches, patios and other structures associated with buildings and more particularly has reference to an awning of rigid construction which will be especially durable and which may be quickly and easily demounted and disassembled for storage during the winter months when the awning is not required.

More particularly, an aim of the present invention is to provide a rigid awning structure which may be dismantled and demounted as quickly and easily as a fabric awning and stored in a space of approximately the same size yet which will be especially durable in use and capable of withstanding strong wind, snow and ice, if it is desired to leave the awning in an applied position throughout the entire year.

A further object of the invention is to provide an awning having an attractive appearance wherein all bulky protrusions, pockets or the like likely to collect dirt, snow, ice, leaves and other debris which tend to cause corrosion or deterioration of either the outer or inner side of the awning, are completely eliminated and wherein no laps or irregular angles are visible, as that existing joints afford a pleasing symmetrical appearance.

A still further object of the invention is to provide an awning through which air can readily circulate to prevent the accumulation of hot air therebeneath and to prevent air from being trapped beneath the awning in strong winds and which might otherwise tend to tear the awning from its supporting structure.

Numerous other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawings, illustrating a presently preferred embodiment thereof, and wherein:

Figure 1 is a perspective view showing an awning construction in accordance with the invention and in an applied position on a window frame;

Figure 2 is a fragmentary perspective view showing a portion of the assembled awning demounted;

Figure 3 is a view similar to Figure 2 with a portion of the frame only of the awning;

Figure 4 is a perspective view of one section of one of the sides of the awning;

Figure 5 is an enlarged sectional view taken substantially along a plane as indicated by the line 5—5 of Figure 1;

Figure 6 is a sectional view taken substantially along a plane as indicated by the line 6—6 of Figure 5;

Figure 7 is a fragmentary cross sectional view through a portion of the top of the awning and showing certain of the sections thereof in a released position;

Figure 8 is a perspective view of certain of the sections constituting the top of the awning in released position, and

Figure 9 is a perspective view of one of the

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detachable clips by which the top portion of the awning is demountably secured to the awning frame.

Referring more particularly to the drawings, the novel awning in its entirety and comprising the invention is designated generally 10 and includes a frame, designated generally 11 having upright side members 12 and top and bottom members 13 and 14, respectively, constituting the back thereof and which are formed of angle iron and adapted to be detachably secured against a supporting surface such as a window frame or wall by detachable fastening means, not shown, to permit the frame 11 to be readily demounted. The frame 11 also includes outwardly projecting horizontal side members 15 of angle iron which project outwardly from the lower end of the uprights 12 and which are connected at their outer ends to the upper inclined side members 16 which are likewise formed of angle iron and which extend inwardly and upwardly therefrom and join with the uprights 12, adjacent the upper ends thereof. The frame 11 also includes an outer crossbar 17 of angle iron which extends between the outer ends of the side members 15 and 16, and an intermediate crossbar 18 of angle iron which extends between the intermediate portions of the upper side members 16.

Each of the uprights 12 has a strip 19 suitably secured at its ends thereto and disposed on the outer sides thereof and which provides a plurality of upwardly and outwardly facing oblique surfaces 20 and downwardly and inwardly facing oblique surfaces 21, disposed between said surfaces 20. The bottom side members 15 each have a strip 22 secured longitudinally to the outer side thereof provided with a plurality of longitudinally spaced outwardly projecting flanges 23 each of which is provided with a downturned outer edge 24 which is disposed obliquely to the side member 15.

The top portion, designated generally 25 of the awning 10 is formed of a plurality of elongated sheet metal strips or panels 26 each of which has downturned side edges 27, normally disposed at obtuse angles thereto, as best seen in Figure 7 and which are provided with three longitudinally spaced openings 28 in corresponding portions thereof for receiving rods 29 that extend slideably through the aligned openings of the inturned edges or flanges 27 and which are provided with threaded ends for receiving nuts 30 adapted to be tightened for drawing the strips 26 together and so that the flanges 27 thereof will be drawn into parallel relationship to one another and to positions at right angles to said strips 26, as best seen in Figure 5.

The openings 28 are spaced so that the rods 29 will be disposed above the frame members 13, 17 and 18 and said strips 26 have downturned lower end portions 31 which are disposed outwardly of the outer cross bar 17 and at oblique angles to the remainder of the strips 26 to form scallops

and the flange portions thereof are each provided with one of the openings 28 for accommodating one of the rods 29 which is located outwardly of said cross bar 17.

As best seen in Figures 6 and 9, two or more clips, each designated generally 32, are detachably connected to each of the frame members 13, 17 and 18. The clips 32 are each formed from a strip of bendable metal and includes an upper portion 33 having an integral upstanding loop 34 through which one of the rods 29 extends and a downturned terminal portion 35. The clips 32 also include a longer leg 36 which is disposed substantially at a right angle to the portion 33. The portions 33 and 36 are adapted to be disposed against the outer sides of the two sides of either of the bars 13, 17 or 18 and the terminal 35 is then bent upwardly and inwardly against the inner side thereof and the terminal portion of the leg 36 is similarly bent upwardly and inwardly to engage the inner side of the frame bar for demountably attaching the clip 32 thereto and it will be readily obivous that said clips by engagement with the rods 29 will attach the assembled awning top 25 to the frame 11 and so that the edges of the flanges 27 will rest upon the bars 13, 17 and 18.

The side portions of the awning 10, each designated generally 37, each include an upper slat 38 formed of a strip of sheet metal having an upturned side edge forming a flange 39 which is disposed at an obtuse angle to the body of the slat 38 and which is adapted to fit on the inner side of the adjacent flange 27. The slat 38 is disposed with its plane obliquely to the plane of the awning top 25 and extends parallel thereto and the upper end thereof rests upon the uppermost surface 20 of one of the strips 19 and is secured thereto by fastenings 40. The slats 38, beyond the lower end of the flange 39, as best seen in Figure 4, has a down-turned scallop portion 41 which depends to below the frame strip 22 and is secured to the forwardmost flange 24 thereof by another fastening 40. The other side edge of the slat 38 is turned downwardly to provide a flange 42 which extends from the upper end of said slat to the lower end of its scallop 41. The awning side 37 also includes a plurality of slats, each designated generally 43 and which differ from one another only in respect to the fact that said slats diminish in length towards the lower ends of the sides 37. Said slats 43 likewise differ from the slats 38 only in that the flange 39 is omitted and these slats likewise are secured by fastenings 40 at their upper ends to the remaining surfaces 20 and by additional fastenings 40 in the scallops 41 thereof to the flanges 24. It will be readily apparent and as clearly illustrated in Figure 5, that air spaces are thus provided as seen at 44 between the slat flanges 42 and the slat disposed therebelow to afford a free circulation of air through the assembled and mounted awning, as illustrated in Figure 1.

It will likewise be readily apparent that by straightening the ends of the clips 32, said clips can be detached from the frame 11 for demounting the awning top 25 which may thereafter be disassembled, if desired, and the side curtain 37 of the awning may then be demounted with the frame 11 by detaching the fasteners, not shown, by which said frame is secured to the window frame 46, as illustrated in Figure 1 or by which the frame 11 may be attached directly to the outer side of the wall of a building.

Where the upper, inner edge of the awning 10 is not disposed beneath an eave or other overhanging structure of its supporting structure, a flashing strip 45 of angle-shaped cross section may be positioned with one side thereof located between the bar 13 and the structure to which the frame 11 is secured with the other side thereof projecting outwardly and over-lying the upper edges of the strips 26, as seen in Figure 1.

The awning 10 may be formed of any suitable lightweight material, preferably aluminum or other corrosion and rust resisting material and may obviously be made in various sizes, depending upon the purpose for which it is intended to be used.

Various other modifications and changes are likewise contemplated and may obviously be resorted to, without departing from the spirit or scope of the invention as hereinafter defined by the appended claims.

I claim as my invention:

1. An awning of the rigid type having a frame whose side members are arranged in triangular form adapted for connection at one side to a vertical wall and having upper members sloping downwardly and outwardly from the wall, horizontally-extending cross bars connecting the said upper members of the frame, awning-top panels all having depending yieldable flanges along their longitudinal edges, in normally relatively-flared relation, a threaded tie rod extending through the flanges of the panels and having nuts thereon to clamp the panels in close-fitting edge-to-edge relation at a common plane and with their flanges flexed into parallelism with one another, and clips embracing the rod, at points between the flanges of certain of the panels, and also having hooked engagement with one of the cross bars, to hold the top on the frame.

2. An awning of the rigid type having a frame provided with members positioned to slope downwardly and outwardly in a common plane, from a wall to which the frame is attached, a cross bar connecting these frame members in unitary relation, means for connecting the upper and lower ends of the frame members to a wall, awning-top panels disposed in a plane above the frame members and parallel thereto, and all having depending yieldable flanges at their edges, a tie rod extending through the flanges, with abutment elements on its ends for holding the panels in unitary relation and the opposed flanges tightly against one another, and hook elements partly embracing the tie rod and having releasable connection with the cross bar, in position to hold the panels on the said frame members.

JOSEPH J. CICIARELLI.

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