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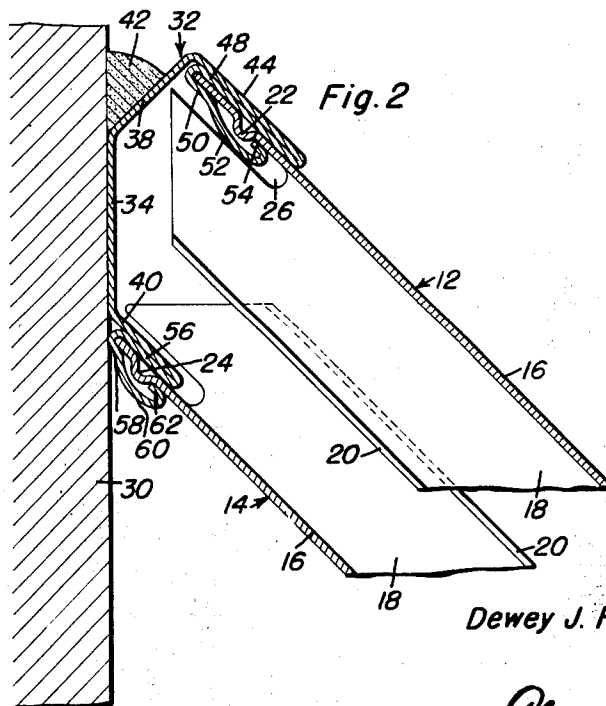
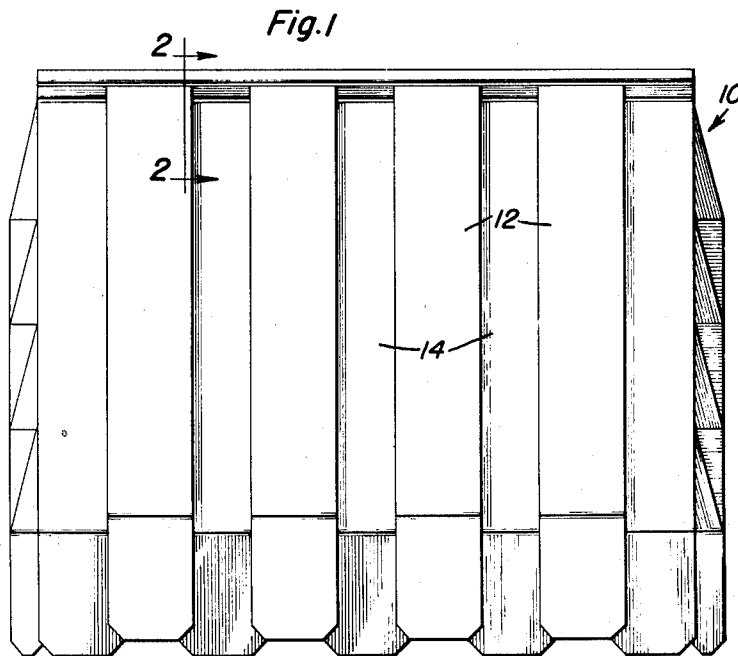
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RESILIENT FASTENER FOR RIGID VENTILATED AWNINGS

Original Filed June 13, 1946

2 Sheets-Sheet 1



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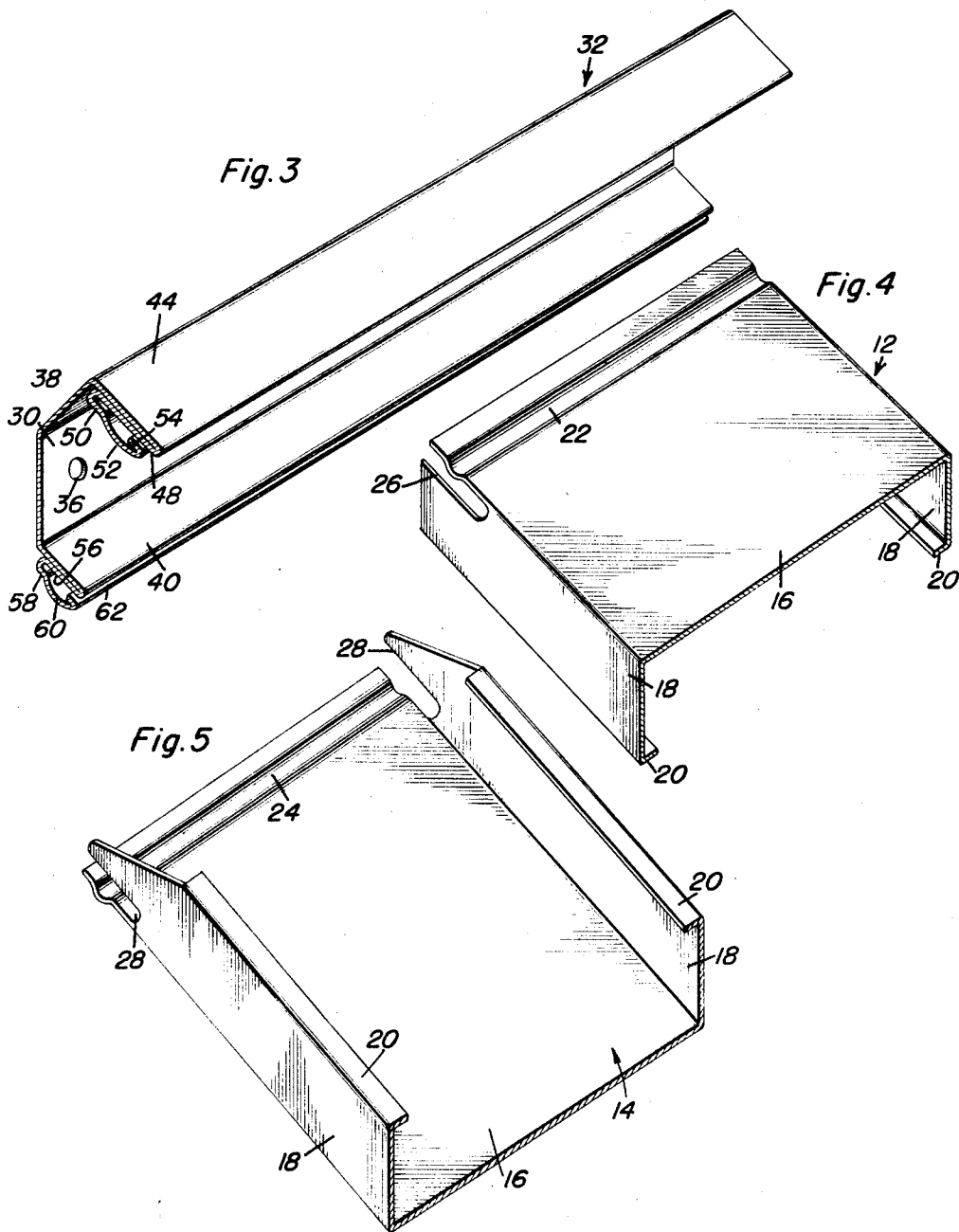
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2 Sheets-Sheet 2



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## UNITED STATES PATENT OFFICE

2,639,477

RESILIENT FASTENER FOR RIGID  
VENTILATED AWNINGS

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eighty-five per cent to Lionel Babin and fifteen  
per cent to Dudley Melancon, both of Houma,  
La.

Original application June 13, 1946, Serial No.  
676,457. Divided and this application Novem-  
ber 24, 1950, Serial No. 197,426

11 Claims. (Cl. 20—57.5)

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This invention comprises novel and useful im-  
provements in a resilient fastener for rigid ven-  
tilated awnings and constitutes a division of my  
co-pending application Serial Number 676,457,  
filed June 13, 1946, for Rigid Type Sheet Material  
Awning and which has now matured to Patent  
Number 2,542,919, issued February 20, 1951.

The principal object of this invention is to  
provide an improved fastener for resiliently sup-  
porting the upper ends of rigid ventilated awn-  
ings from a vertical supporting surface, mounted  
simultaneously assisting in securing in proper  
spaced position the components of the awning  
and in reenforcing and rendering more rigid the  
construction of the upper portion of an awning.

More specifically, it is the primary object of  
this invention to provide a resilient fastener for  
securing to each other and to a vertical support-  
ing surface the upper ends of two sets of panels  
of a sectional rigid, ventilated awning of the types  
set forth in my above identified co-pending ap-  
plication.

A still further object of the invention is to pro-  
vide a resilient fastener which will releasably and  
yieldingly maintain the upper ends of the two  
sets of panels comprising the awning in properly  
spaced relation with respect to each other; will  
individually secure these sets of panels to a ver-  
tical supporting surface in properly spaced rela-  
tion; and will serve to reenforce and rigidify the  
upper end of an awning composed of two sets of  
panels.

An additional important object of the inven-  
tion is to provide a resilient fastener in con-  
formity with the preceding objects in which the  
actual fastening engagement of the device with  
the awning panels shall be concealed and pro-  
tected against inclemency of weather and the  
like, the ingress of dirt.

Yet another object of the invention is to pro-  
vide a resilient fastener construction for rigid  
ventilating awnings of the type having two sets  
of panels in which the fastening engagement with  
the panels is maintained in an efficiently operat-  
ing and easily releasable condition throughout  
the life of the device; and wherein the individual  
panels of the two sets of panels may be selectively  
and individually engaged or detached from the  
resilient fastener by a longitudinal, inward move-  
ment of the panels.

These, together with various ancillary features  
and objects of the invention, which will later  
become apparent as the following description pro-  
ceeds, are attained by the present invention, a  
preferred embodiment of which is illustrated, by

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way of example only, in the accompanying draw-  
ings, wherein:

Figure 1 is a front elevational view of a rigid  
ventilated metal awning composed of a plurality  
of panels and of the type in which the present  
invention is to be employed;

Figure 2 is a vertical longitudinal sectional view  
taken substantially along the plane indicated by  
the section line 2—2 of Figure 1 and illustrating  
the manner in which the panels of the awning  
are attached to the resilient fastener and by the  
latter to a vertical supporting surface;

Figure 3 is a fragmentary perspective view of  
the resilient fastener in accordance with this  
invention; and

Figures 4 and 5 are fragmentary perspective  
views of the upper and associated ends of upper  
and lower panels which are adapted to be resili-  
ently secured by the resilient fastener of this  
invention.

The resilient fastener, according to the prin-  
ciples of this invention, while not limited thereto,  
is especially useful in securing the upper ends of  
upper and lower sets of inclined panels of awn-  
ings of the type set forth in my co-pending ap-  
plication.

Referring now more specifically to the accom-  
panying drawings, wherein like numerals desig-  
nate similar parts throughout the various views,  
it will be seen that the numeral 10 designates  
any suitable form of rigid ventilated awning and  
preferably of the type comprising an upper set of  
panels 12 which overlie in spaced relation a lower  
set of similar but inverted panels 14.

As it will become apparent from Figures 2, 4  
and 5, each of these panels, of both sets, consist  
of a member of sheet metal or other sheet mate-  
rial providing elongated bottom walls 16, a pair  
of marginal side walls 18, these latter having at  
their free ends, inturned lateral flanges 20 which  
thus overlie the bottom walls 16. The members  
12 and 14 thus constitute channel members and  
at one end of the same the bottom walls 16 are  
provided with a transversely extending raised rib  
or ridge 22 which may be formed by suitably  
bending the end portion of the bottom wall.  
However, it is preferred to form this rib 22 on the  
top panel 12 by bending the same inwardly or  
between the side walls 18, or the corresponding  
rib 24 on the bottom panel 14 is preferably formed  
by bending this rib outwardly with respect to  
the side walls.

At their corresponding ends, the side walls 18  
of the top panel 12 are provided with longitu-  
dinally extending notches 26, and similar notches

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28 are provided in the side walls of the bottom panel.

These notches and ribs constitutes means as set forth hereinafter to resiliently support the panels and secure the upper ends of the same in properly spaced relation.

As shown best in Figures 2 and 3, the awning 10 is supported at its upper end from a vertical supporting surface such as a wall or the like 38 upon a horizontally disposed supporting member constituting a flashing and indicated generally by the numeral 32. The member 32 may be of any desired material and may obviously be constructed in various manners. In the form chosen to illustrate the principles of this invention, the support member 32 is constructed of an inexpensive material such as sheet metal or the like, and is in the form of a horizontally extending channel member. This channel member comprises a sheet of material folded and bent upon itself to provide a flat bottom wall or face 34 having apertures 36 by means of which the same may be secured to the supporting surface, together with inclined upper and lower portions 38 and 40. When mounted, a suitable sealing material indicated at 42 may be disposed between the supporting surface 38 and the upwardly extending inclined portion 38.

From its upper edge, the material of the upper inclined portion 38 is downturned as at 44 into parallel relation with the downwardly inclined portion 40. The portions 34, 38, 40 and 44 thus constitute a channel member, and the top and bottom walls 44 and 40 thereof support resilient clips or fasteners for securing the two sets of panels 12 and 14.

The upper fastening means for securing the upper panels and within the channel member is formed by providing an inturned portion of material as at 48 which lies against, within and underlies the portion 44, and is then bent backwardly upon itself to provide a flat portion 50 and a bowed portion 52 whose lower end is inturned as at 54. The natural resiliency of this material is such that the end 54, bowed portion 52 and the portion 50 are yieldingly biased or urged towards the fold or sheet 48 of the material, whereby the bottom walls 16 of the top panel 12 may be thrust inward and upwardly as shown in Figure 2. When so positioned, the extreme end of the bottom wall 16 will be received between the portions 48 and 50 and abutted against the curved part connecting these portions, while the transverse rib 22 will be received within the bowed portion 52 and the inturned portion 54 will constitute a lock or stop shoulder which engages the lower side of the rib 22 to hold the same in place. It will thus be apparent that the top panel is resiliently, releasably but securely clamped and frictionally held in place and supported by the top wall 44 of the channel member, the transversely disposed portions 50, 52, and 54 being received in the notch or slot 26 in the side walls 18 of this panel.

The lower panel 14 is releasably, resiliently and frictionally clamped and held in position in a similar manner. Thus, the portion 40 is folded downwardly and backwardly upon itself to provide a portion 56 which in turn is then folded downwardly and upon itself to provide a flat portion 58, a bowed portion 60 and an inturned end portion 62 similar to the members 50, 52 and 54. The depending rib 24 of the bottom walls 16 of the bottom panel 14 is thus clamped and held in place in the lower fastening means of

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the same manner as that previously described with respect to the upper fastening means.

Thus, the support member has the clips disposed between the inclined upper and lower surfaces of the support member, the surfaces being the top surface of the top wall 44 and the bottom surface of the member 60.

It will be here noted that the construction above described permits the easy insertion of any individual panel or its easy removal from the fastening means by an inward sliding movement of the panel without disturbing the other panels of the awning. Further, the connection is such that a panel can readily be shifted laterally or transversely of the support member with the ribs 22 or 24 riding upon the upper edges of the stop portions 54 or 62, while the ribs are retained in the fastening means.

The above described construction very materially facilitates the erection of a panel or sectional type of awning even in very inconvenient locations such as upon the wind swept side of a building from the top of a ladder, since it is nearly necessary to anchor or secure the support or channel member, then position the rest of the supporting framework of the awning, not shown, but which may be of the types set forth in my co-pending application, and thereupon successively apply the upper and lower panels by an inward sliding movement.

It should be particularly noted that the connection of the panels with the supporting member is well sheltered and protected by being disposed within the interior of the same and in a position which prevents deterioration of the fastening means and its releasable engagement under the adverse influences of the weather and the like, whereby the panels will be individually securely retained, and easily assembled or disassembled as desired. The deterioration of the fastening means in similar types of awnings, especially where these fasteners consist of rivets or bolts, by virtue of their weathering, has been a very great source of dissatisfaction as regards to ease of applying and disassembling awnings of this type.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A resilient fastener for awnings of the type having upper and lower sets of panels, comprising a horizontally disposed support member having inclined top and bottom surfaces and inclined top and bottom walls therebetween, resilient clips within said support member between said top and bottom surfaces for securing each of said upper and lower sets of panels to the lower surface of one of said walls.

2. A rigid ventilated awning including a horizontally extending support member adapted to be mounted upon a supporting surface, said support member having upper and lower fasteners, upper and lower sets of panels adapted for attachment to said support member, means to releasably retain the ends of said sets of panels in said upper and lower fasteners.

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3. The combination of claim 1 wherein said support member has the resilient clips supported by the top and bottom walls.

4. The combination of claim 1 wherein said support member has the resilient clips supported by the top and bottom walls, and integral therewith.

5. The combination of claim 1 wherein said top wall has an intumed underlying portion and a downturned portion resiliently biased there against, said underlying and downturned portions together constituting one of said resilient clips.

6. The combination of claim 1 wherein said bottom wall has an underlying portion and a downturned portion resiliently biased there against, said portions together constituting one of said resilient clips.

7. The combination of claim 2 wherein each of said fasteners comprises a pair of transversely extending members resiliently biased towards each other, said panels having their ends frictionally retained in said pair of members.

8. The combination of claim 2 wherein each of said fasteners comprises a pair of transversely extending members resiliently biased towards each other, said panels having their ends frictionally retained in said pair of members, said panels having transverse ribs disposed between said members, one member of each pair having a retaining means for holding said rib between said members.

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9. The combination of claim 8 wherein said panels have side walls with notches in their ends for receiving said members.

10. The combination of claim 2 wherein each of said fasteners comprises a pair of transversely extending members resiliently biased towards each other, said panels having their ends frictionally retained in said pair of members, said panels having transverse ribs disposed between said members, one member of each pair having a retaining means for holding said rib between said members, said support members enclosing the upper ends of said panels.

11. In a rigid sheet metal awning, a horizontally extending support member having spaced top and bottom walls, an awning roof including upper and lower panels, a pair of fasteners on said support member and positioned each beneath one of said walls, said panels being each secured to one of said fasteners.

DEWEY J. FREEMAN.

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