May 8, 1928. 1,668,938

J. S. BUCKNAM, JR., ET AL

COMBINED AWNING AND SHUTTER

Filed Feb. 25, 1927 2 Sheets-Sheet 1

Fig. 1.

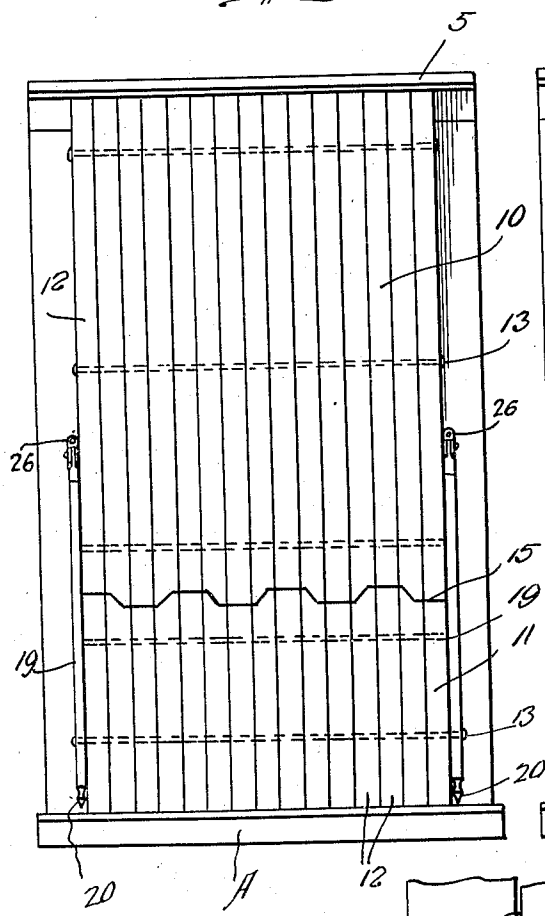


Fig. 2.

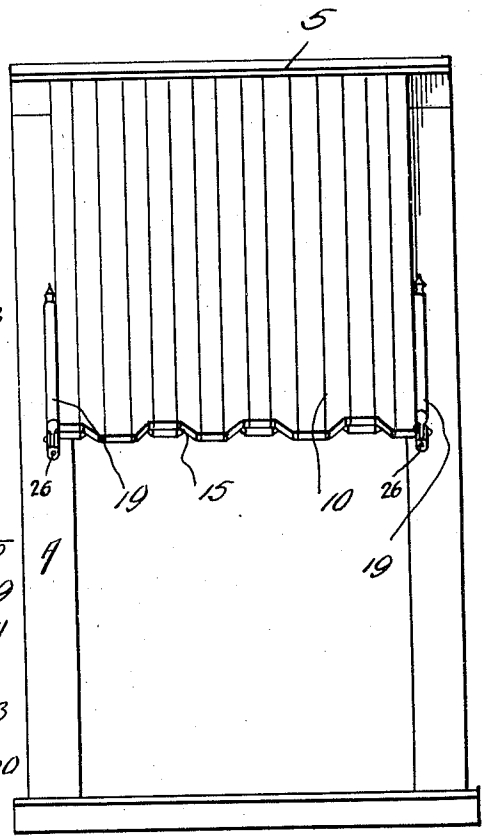
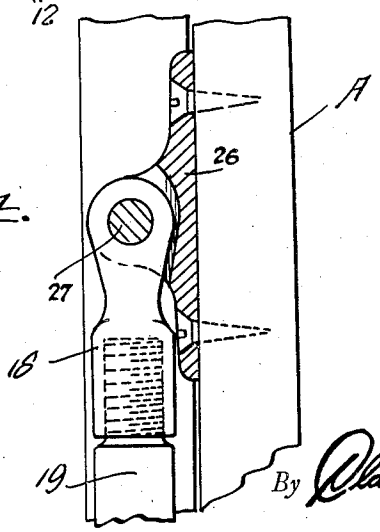


Fig. 4.



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Fig. 5

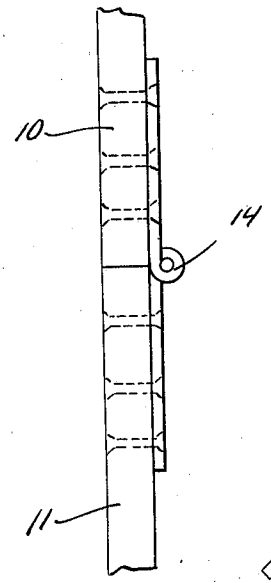


Fig. 3.

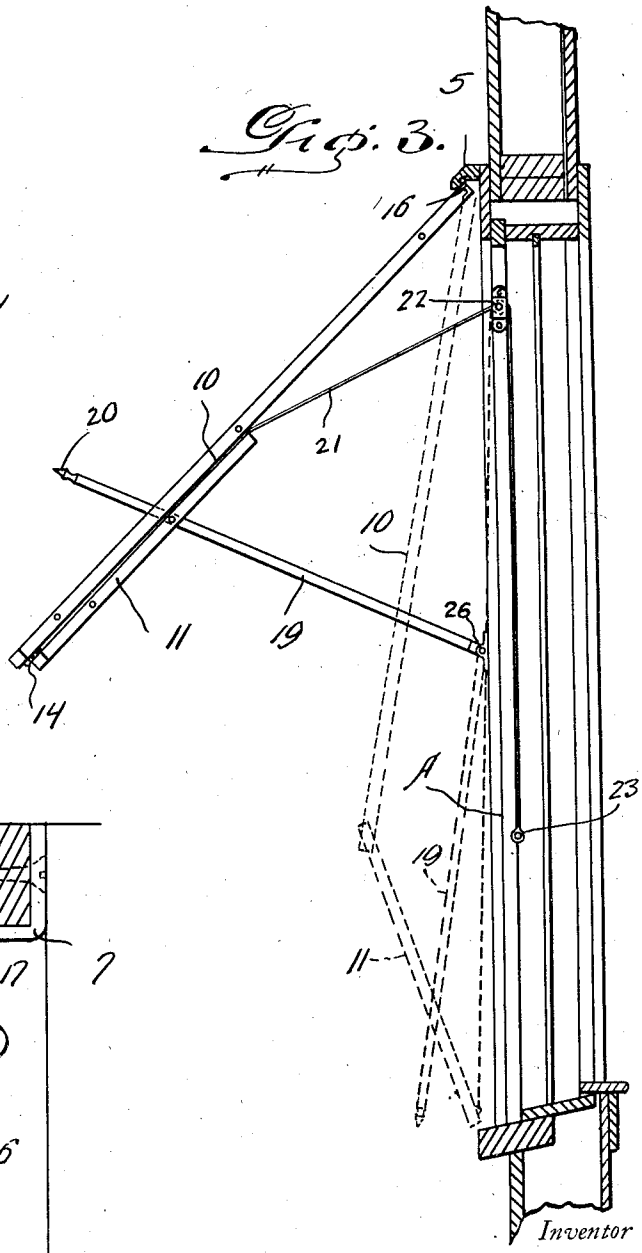
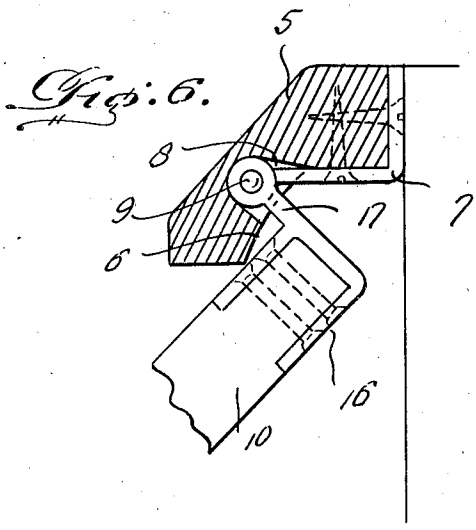


Fig. 6.



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UNITED STATES PATENT OFFICE.

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COMBINED AWNING AND SHUTTER.

Application filed February 25, 1927. Serial No. 170,901. REISSUED

This invention relates to new and useful improvements in awnings, and shutters for windows and has for its primary object to provide a device that may be conveniently employed as an awning to shade the window or as a shutter to completely cover the same.

A further and important object resides in the provision of such a combination device that is relatively simple in construction, inexpensive of manufacture and installation, and one that may be readily moved to awning or shutter position, and this without leaving the interior of the building.

With the foregoing and other objects in view as the nature of the invention will be better understood, the same comprises the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawings and claimed.

In the drawings wherein like reference characters indicate corresponding parts throughout the several views:

Figure 1 is an outer side elevation of a building window equipped with our improved device, the same being disclosed as providing a shutter for the window.

Figure 2 is a similar view, the device being raised to provide an awning.

Figure 3 is an enlarged vertical section through the window disclosing the device in edge elevation, the full line position being the awning position, while the dotted lines represent the device in partially closed position for providing a shutter for the window.

Figure 4 is an enlarged section disclosing one of the pivotal connections between one of the supporting bars and the window frame.

Figure 5 is a fragmentary elevation of the main and secondary panels of the device disclosing one form of hinge connection therebetween, and

Figure 6 is a sectional view disclosing more clearly the means of attachment of the device to the window frame.

Now having particular reference to the drawings, A designates a convention sliding sash frame within a building and rigidly anchored to the outer side thereof at its upper longitudinal edge is a horizontal weather shed strip 5 having an inclined forward surface as more clearly disclosed in Figure 6 and formed at its rear side with a longitudinally extending channel 6, the outer surface of which is of rounded contour, while the top surface is flat as clearly disclosed in Figure 6. Secured to the back surface of this weather shed strip is one or more L-brackets 7, the inner end of which projects beneath the flat upper surface of the channel 6 and enters a rounded socket 8 therein, and being formed at this end with a pin 9.

The shutter and awning per se consists of a main panel 10 and a sub-panel 11 of less length than the main panel as clearly indicated in Figures 1 and 3. Each of these panels consists of a plurality of wood or other suitable strips of material 12 laid in edge-to-edge relation and interconnected through the medium of horizontal tie rods 13 extending therethrough. The panels 10 and 11 are hingedly interconnected as at 14, so that the panel 11 may swing rearwardly beneath the panel 10 but to prevent the outward swinging movement of the panel 11 with respect to said panel 10. Furthermore, the adjacent edges of these panels are formed with interfitting scallops 15 mainly for increasing the ornamental appearance of the edge of the main section 10 when the device is extended to provide an awning as more clearly disclosed in Figure 2.

Arranged upon the upper edge of the main panel 10 is one or more U-brackets 16 depending upon the number of the L-shaped brackets 7 secured to the weather shed strip 5, this bracket being formed with a forwardly projecting finger 17 having a flattened end with a hole in the center for receiving the pin 9 of said bracket so as to provide a hinged connection between the panel and the strip 5.

Arranged upon the side boards of the window frame A directly at the edges of the main panel 10 and above the lower edge thereof are pivot plates 26—26 to each of which is horizontally pivotally secured as at 27 in Figure 4 a depending socket member 18. Threaded within these socket members are the reduced threaded ends of supporting bars or poles 19—19 that are pivoted adjacent their outer ends to the edges of the sub-panel 11 preferably through the medium of the ends of the outermost tie rod 13 passing therethrough as in Figure 1. The ends of these bars 19 preferably extend beyond

their pivotal connection with the panel 11 and are provided at their ends with spear points 20 for ornamental purposes only.

Secured to the lower edge of the sub-panel 11 at one edge thereof is a cord or cable 21 that extends upwardly and that is trained over a suitable guarded pulley 22 after which the same is allowed to hang down as in Figure 3, the cord or cable being equipped at its free end with a pull member 23. Obviously when the panels 10 and 11 are in alinement, the same may be moved against the window frame A for providing a shutter. By pulling upon the cord or cable 21, the lower panel 11 will be raised at its edge for consequently forcing the upper panel 10 outwardly by reason of the connection of the poles 19—19 with this lower panel. After being raised to the position disclosed in Figure 3, the weight of the panels will be directed through the poles 19—19 against the window frame to be maintained in such position by reason of said poles. However, by quickly jerking the cord 21, the panels and posts will be vibrated so as to permit the same to swing downwardly into the shutter forming position previously described.

It will thus be seen that we have provided a highly novel, simple, and efficient combination awning and shutter that is well adapted for all the purposes heretofore designated. Even though we have herein shown and described the invention as consisting of certain detail structural elements, it is nevertheless to be understood that some changes may be made therein without affecting the spirit and scope of the appended claims.

Having thus described the invention, what we claim is:—

1. The combination with a window frame, of a combined awning and shutter comprising a main rigid panel pivotally secured at its upper edge to the outer side of the window frame at the top thereof, a sub-panel hingedly secured at its upper edge to the lower edge of the main panel, a pair of bars pivoted at their inner ends to the respective sides of the window frame at the intermediate portion thereof, the outer ends of the bars being pivotally secured to the intermediate portion of the sub-panel, and flexible means attached to the lower edge of the sub-panel and operable from the inside of the window frame for swinging the sub-panel upwardly beneath the main panel and simultaneously urging the main panel outwardly to an awning forming position, said bars supporting the panels in the last mentioned position.

2. The combination with a window frame, of a combined awning and shutter, the same comprising main and sub-panels hingedly secured together at their adjacent edges, a weather strip extending across the top of the outside of the window frame, the upper edge of the main panel being hingedly secured to the under side of said strip, a pair of bars pivotally secured at their inner ends to the respective sides of the window frame at the intermediate portion thereof, the outer ends of said bars being pivotally secured to the respective side edges of the intermediate portion of the sub-panel, and flexible means attached to the lower free edge of the sub-panel and operable from within the window frame to swing the sub-panel upwardly beneath the main panel and simultaneously dispose the panels in an inclined awning forming position, said bars supporting the panels in this position.

In testimony whereof we affix our signatures.

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WILSON F. DE GROAT.