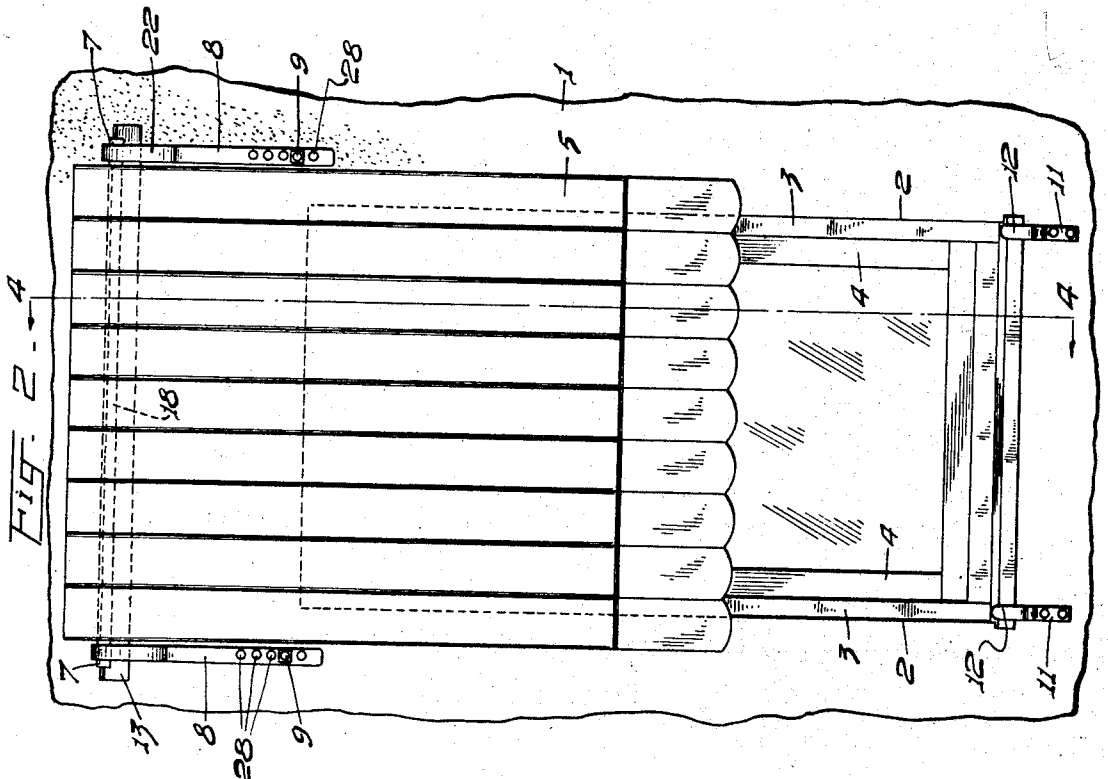
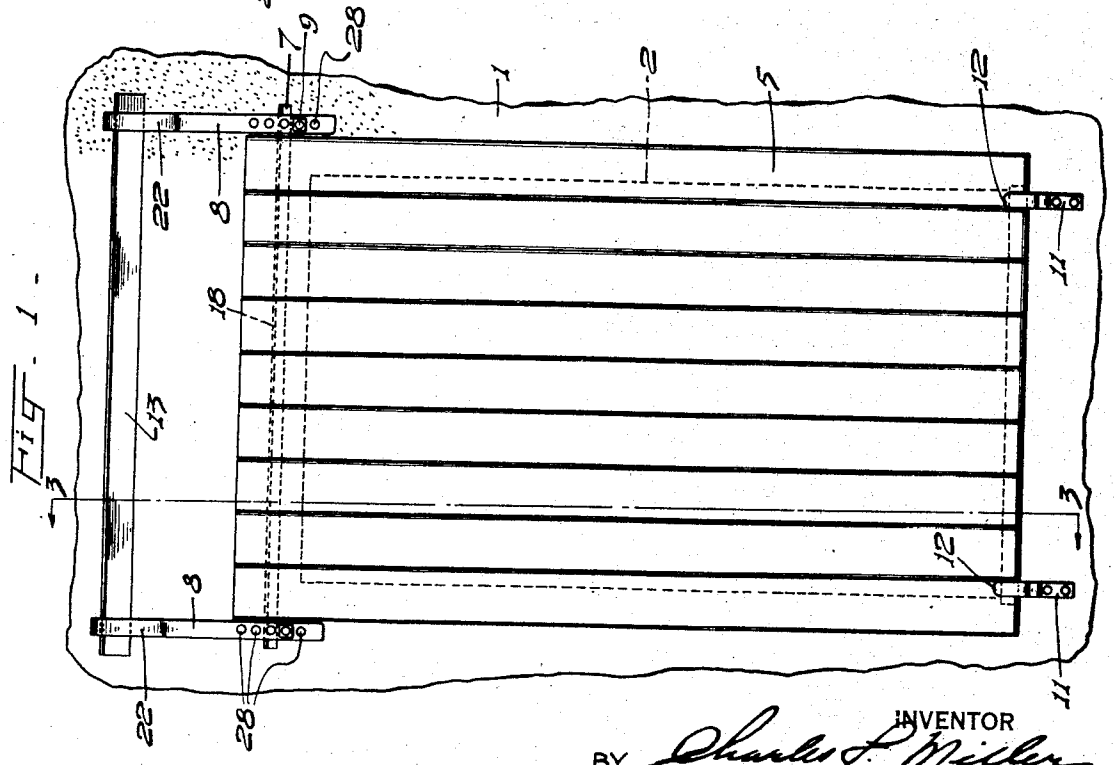
March 28, 1933. C. F. MILLER 1,902,879

COMBINED AWNING AND SHUTTER

Filed Nov. 18, 1929 3 Sheets-Sheet 1





INVENTOR

BY Charles F. Miller

his ATTORNEY

March 28, 1933. C. F. MILLER 1,902,879

COMBINED AWNING AND SHUTTER

Filed Nov. 18, 1929 3 Sheets-Sheet 2

Fig. 5.

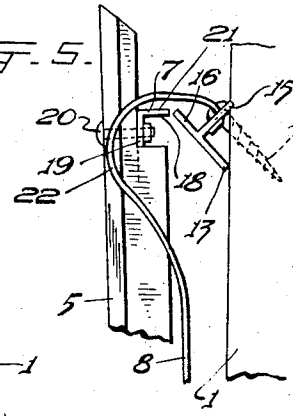


Fig. 3.

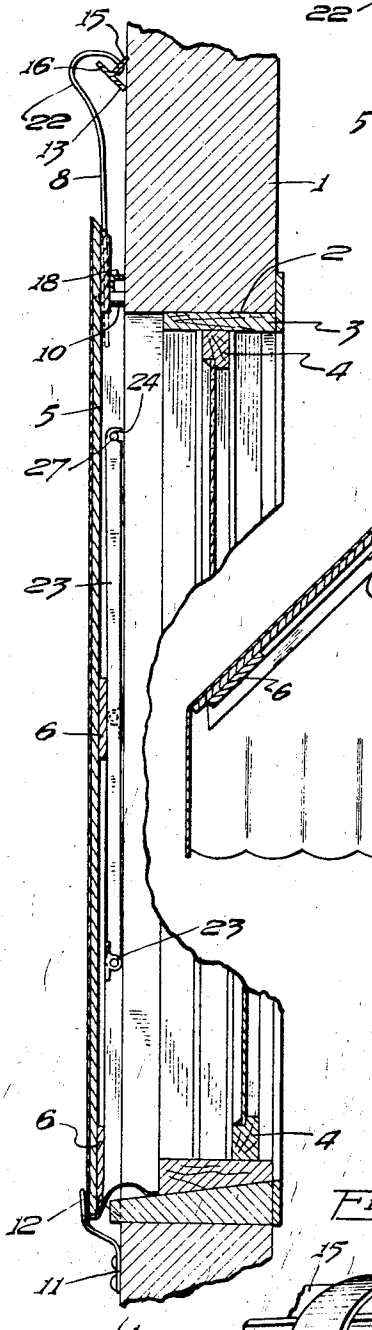
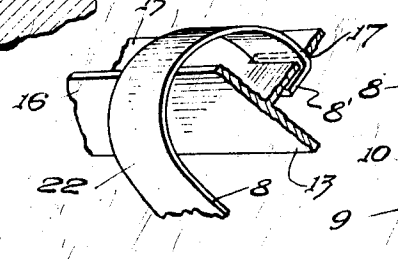


Fig. 4.

Fig. 6.

Fig. 7.



INVENTOR
Charles F. Miller
BY
Ernest C. Peckham
his ATTORNEY

March 28, 1933. C. F. MILLER 1,902,879

COMBINED AWNING AND SHUTTER

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Fig. 9.

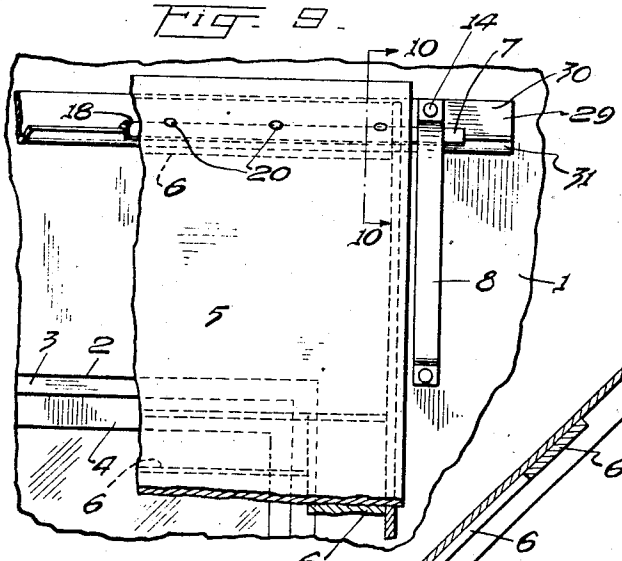


Fig. 8.

Fig. 10.

Fig. 11.

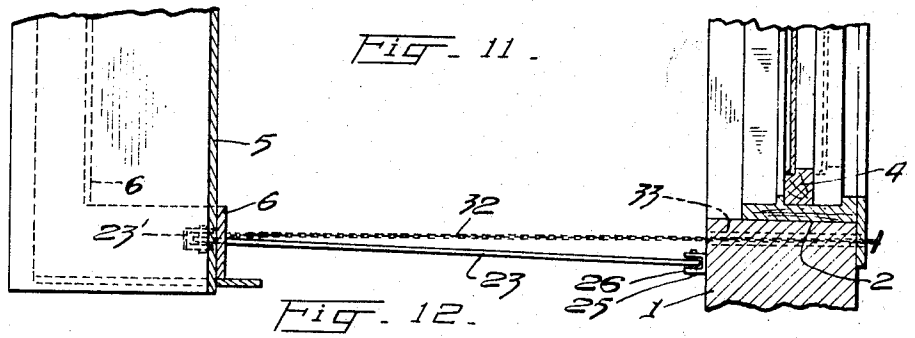


Fig. 13.

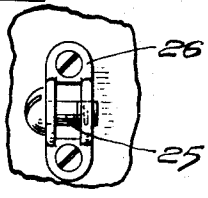
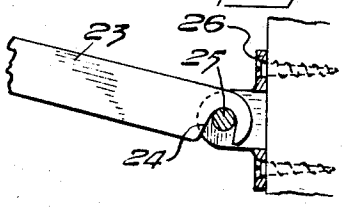


Fig. 12.



INVENTOR
Charles F. Miller
BY
Frank J. Mecklenburg
his ATTORNEY

Patented Mar. 28, 1933 1,902,879

UNITED STATES PATENT OFFICE

CHARLES F. MILLER, OF MIAMI, FLORIDA

COMBINED AWNING AND SHUTTER

Application filed November 18, 1929. Serial No. 408,045.

My invention relates to a protective device for a window opening and the like, and has for its principal object the provision of means adapted to serve either as an awning for the opening or as a shutter or closure therefor.

A primary feature of the invention consists in associating with the window opening a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be disposed in an elevated and inclined position to serve as an awning for the opening, means being attached to the wall of the building above the opening for cooperating with means carried by the rigid member to support the latter in an elevated position.

Another feature of the invention consists in providing the upper portion of the rigid member with a flanged member engageable with an outwardly projecting portion of a member secured to the building wall above the window opening for supporting the rigid member in an elevated position.

Another feature of the invention consists in providing means cooperable with the upper portion of the rigid member for guiding the latter as it is being moved from one operative position to another.

A further feature of the invention consists in providing the rigid member with laterally projecting arms for cooperating with the guiding means.

A still further feature of the invention consists in so forming the guiding means as to prevent upward movement of the protective device when in awning position.

Other and more specific features of the invention residing in advantageous forms, combinations and relations of parts will hereinafter appear and be pointed out in the claims.

In the drawings illustrating preferred embodiments of the invention:

Figure 1 is a front view of the device when in shutter or closure position.

Figure 2 is a similar view of the device when in awning position.

Figure 3 is a sectional view taken on line 3—3, Figure 1.

Figure 4 is a sectional view taken on line 4—4, Figure 2.

Figure 5 is an enlarged end view of the upper portion of the device preparatory to being engaged with its support.

Figure 6 is an enlarged view of the upper portion of the device in awning position.

Figure 7 is a detailed fragmentary perspective view of the supporting member and one of the guide bars.

Figure 8 is a fragmentary view corresponding to Figure 4 illustrating a modified form of the invention.

Figure 9 is a fragmentary front view of the construction illustrated in Figure 8.

Figure 10 is an enlarged fragmentary view taken on line 10—10, Figure 9.

Figure 11 is a sectional view taken on line 11—11, Figure 8.

Figure 12 is an enlarged detailed view of one of the bracket members and a portion of its cooperating arm.

Figure 13 is a front view of the bracket illustrated in Figure 12.

Referring more particularly to the drawings and specifically to Figures 1 to 7, inclusive, 1 indicates the wall of a building having an opening 2 within which is mounted a window frame 3 provided with a sash 4 of any desirable construction. The protective device for the window opening generally comprises a rigid member 5 which is adapted to be moved either into a substantially vertical position to serve as a shutter or closure for the opening or into an elevated and inclined position to serve as an awning for the opening. While it is preferred that this member being constructed of wood it will, of course, be appreciated that any rigid material may be employed. When made of wood the device may advantageously be reinforced by a plurality of wooden strips or bars 6. To enhance the appearance of the device its outer face may be covered with any desirable water-proof fabric and the bottom and sides thereof may be provided with suitable valances so as to

simulate the usual canvas awnings now in common use.

For movably associating it with the window opening the member 5 is provided adjacent its upper edge with laterally projecting arms 7 for cooperating with bars or straps 8. These bars are respectively rigidly mounted on the wall of the building adjacent opposite sides of the upper portion of the member 5. At their lower ends the bars 8 are secured to the building wall by any suitable means such as bolts 9, which may be provided with ferrules or sleeves 10 for spacing the bars at these points a suitable distance from the face of the building wall. The bolts 9 are so positioned with respect to the window opening and the arms 7 are secured to the member 5 in such positions that the bolts and arms cooperate with each other to support the member 5 in shutter or closure position as clearly shown in Figures 1 and 3 of the drawings.

In order to prevent the lower portion of the member from moving outwardly away from the face of the building, when in shutter position, suitably shaped brackets or clips 11 may be employed. These brackets may be conveniently attached to the building immediately below the window opening and each is formed with an outwardly offset portion 12 for engaging the outer face of the member. Thus it will be seen that before the protective device may be moved outwardly away from the building wall it is first necessary that it be raised vertically to clear the brackets 11.

To support the protective device in an elevated position so that it may serve as an awning for the window opening a horizontally disposed member 13 may be secured to the building wall by lag screws 14 a suitable distance above the window opening. While this member may be of any desirable shape it is preferred to construct it in the form illustrated in Figures 1 to 7 of the drawings, that is, of T-shape. The member is arranged so that its stem 15 extends downwardly preferably at a 45° angle to the building wall and so that its flange 16 projects upwardly at substantially the same angle to the wall. While the upper ends of the guide bars 8 may be secured to the building wall in any desired manner it has been found particularly convenient to provide the stem 15 of the T-shaped member 13 with slots 17 through which the ends of the bars 8 may be inserted and thereafter flanged downwardly as at 8'. In this manner the use of additional securing means for the bars 8 is eliminated and yet they are supported and connected to the building wall in a most rigid manner.

Secured to the inner face of the protective device is a transversely extending member 18 for cooperating with the T-shaped member secured to the building wall. This member 18 is preferably of angle shape having one leg 19 secured to the protective device by bolts 20 and another leg 21 disposed in a plane substantially normal thereto. This latter leg is adapted to engage or hook over the upper portion of the flange 16 of the T-shaped member 13 to support the device in an elevated position. Instead of making the arms 7 separate from the angle member 18 it is preferred to make these parts integral as shown in the drawings.

While the lower portions of the guide bars 8 are spaced only a sufficient distance from the building wall to permit interposition of the arms 7 therebetween to hold the upper portion of the protective device against the building wall when in shutter or closure position, the upper portions of the guide bars 8 are bent outwardly as at 22 to permit the rigid member 5 to move away from the building wall as it is being elevated so that the inwardly projecting flange 21 may be moved into a position such that it can engage over the upper edge of the flange 16 of the member 13. The relative positions of the parts just before the angle member 19 is brought into supporting engagement with the T-shaped member 13 is illustrated in Figure 5.

After the device is in supporting position with the T-shaped member it is swung outwardly, pivoting about the T-shaped member, until it is disposed in a plane forming an angle of substantially 45° with the building wall. To support it in this position a pair of links or bars 23 is employed, each being pivotally mounted on a bracket 23' secured to the inner side of the protective device adjacent a side edge thereof. The opposite ends of the links 23 are respectively provided with notches or recesses 24 adapted to cooperate with screws or pins 25 mounted in brackets 26 secured to the building wall on opposite sides of the window opening. When the links or bars 23 are not is use they may be conveniently supported in inoperative positions by pins or studs 27 carried by some convenient portion on the inner side of the protective device. The pivotal connection between the links 23 and the brackets 23' is such that the former may be moved slightly sideways so that the notches 24 may be easily engaged with and disengaged from the pins 27. After the device has been moved into awning position the links are disengaged from the pins 27 and permitted to rotate downwardly so that their notches may engage with the cooperating screws or pins 25 of the brackets 26 to maintain the device in an inclined position.

In order to prevent the lower portion of the device from being swung outwardly

away from the building a greater distance than is necessary to permit proper cooperation between the links 23 and the pins 25, the angle member 18 is so mounted that when the device is in awning position the upper edge of the latter engages with the building wall. Furthermore, to prevent the device from being moved rectilinearly upward when in awning position the formation of the curved upper portions of the guide bars is such that they are in engagement with the arms 7. It will thus be appreciated that the various parts are so arranged and positioned that when the protective device is in awning position it is rigidly and firmly supported in that position by links 23, by engagement of its upper edge with the building wall and by engagement of its arms 7 with the guide bars 8.

By constructing the protective device, so that, when in awning position, its upper edge engages the building wall not only is the rigidity of the construction enhanced but this arrangement prevents, in a large measure, water from passing between the device and the building wall. However, any water which may pass between the device and the wall will be caught by the T-shaped member 13 and thus prevented from reaching the window opening.

The relative position of the parts, when the device serves as a shutter or closure for the window, is clearly shown in Figures 1 and 3. When in this position it should be noted that the device is firmly held against the building wall by the clips or brackets 11 adjacent its lower edge and the arms 7 and cooperating bars 8 adjacent its upper edge. To cause it to assume awning position it is necessary that the rigid member be raised vertically into a position slightly higher than is illustrated in Figure 5. Upon assuming this position the device is moved inwardly in a substantially horizontal line to cause the flange 21 of the angle member 19 to engage over the upper edge of the flange 16 of the T-shaped member 13. The device is then swung outwardly pivoting about the upper edge of the flange 16 as a center until its upper edge engages with the building wall at which time the bars or links 23 may be disengaged from the pins 27 and engaged with the pins 25. To move the device from awning to shutter position the operation just described is, of course, reversed. Attention is called to the fact that the lower portions of the guide bars 8 are provided with a plurality of apertures 28 with any one of which the bolts 9 may cooperate depending upon the size of the particular window opening.

In the modified form of the invention illustrated in Figures 8 to 11, inclusive, another form of supporting member 29 is disclosed. This member is of angle shape having a leg 30 secured to the building wall by any suitable means and a leg 31 which inclines upwardly forming an angle of substantially 45° with the vertical. This leg 31 is adapted to cooperate with the inwardly projecting flange 21 of the angle member 19 in precisely the same manner as the flange 16 of the T-shaped member 13 cooperates therewith. When this type of supporting member is employed the upper ends of the guide bars 8 are preferably secured to the building wall by any suitable attaching means which may, if desired, pass through the leg 30 of the member 29.

In this form of the invention a different means is disclosed for preventing outward movement of the lower portion of the device when it is in shutter position. This means comprises chains, or the like, 32 which are respectively secured to the inner side of the device adjacent the brackets 26 and which pass through suitably formed openings 33 in the building wall so that they may be secured to some convenient means (not shown) within the building.

From the foregoing it will be perceived that simple and rugged means have been provided for maintaining the protective device in either shutter or awning position and that the device is one which may be easily operated.

I claim:

1. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, means secured to the building wall for supporting said rigid member in vertical position, means secured to the building wall above the said first-named means engageable with said rigid member to support the latter in elevated position, and members adapted to be interposed between the building and rigid member for maintaining the latter in an inclined position.

2. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, means secured to the rigid member adjacent the upper portion thereof, means secured to the building wall above the window opening having an outwardly projecting portion engageable with said first-named means upon upward movement of the rigid member to support the latter in elevated position, and members

adapted to be interposed between the building and rigid member to maintain the latter in an inclined position.

3. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, means for supporting the rigid member in elevated position involving flanged members respectively secured to the rigid member adjacent its upper portion and to the building wall above the window opening, and members adapted to be interposed between the building and rigid member for maintaining the latter in an inclined position.

4. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, means secured to the building wall above the window opening engageable with said rigid member upon upward movement of the latter to support it in an elevated position, a pair of members adapted to be interposed between the building and rigid member for maintaining the latter in an inclined position, and means cooperable with said rigid member for guiding the upper portion thereof as it is being moved from shutter to awning position.

5. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, means for supporting the rigid member in said last-named position, arms projecting laterally of said member adjacent its upper portion, and means secured to the building wall and cooperable with said arms for guiding the rigid member from awning to shutter position.

6. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be disposed in an elevated and downwardly inclined position above said opening to serve as an awning for the latter, means for supporting said rigid member in elevated position, said member being rectilinearly movable from shutter position to said elevated position, arms rigidly secured to said member and projecting laterally thereof adjacent its upper portion, and means secured to the building wall for cooperating with said arms to guide the upper portion of said member as it is being moved from shutter to elevated position.

7. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, arms rigidly secured to said member and projecting laterally thereof adjacent its upper portion, means secured to the building wall for cooperating with said arms to guide the upper portion of the member as it is being moved from one position to another, said arms and guiding means being adapted to prevent movement of the upper portion of the member outwardly away from the building wall when the member is in shutter position, and means for preventing similar movement of the lower portion of said member when in the last-named position.

8. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, arms rigidly secured to said member and projecting laterally thereof adjacent its upper portion, and means secured to the building wall for cooperating with said arms to guide the upper portion of the member as it is being moved from one position to another, said arms and guide means being cooperable to prevent upward movement of the member when in awning position.

9. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, means for supporting the rigid member in elevated position involving flanged members respectively secured to the building wall and the rigid member, each of said flanged members having portions adapted to be disposed in overlapping engagement when the rigid member is disposed in awning position.

10. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a

shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, means for supporting the rigid member in said last-named position involving members respectively secured to the rigid member and the building wall, the said member on the rigid member having portions projecting laterally thereof, and means mounted on the building wall for cooperating with said projecting portions to guide the upper portion of the rigid member as it is being moved from one position to another.

11. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, means for supporting the rigid member in elevated position involving flanged members respectively secured to the rigid member and building wall, the flanged member secured to the rigid member having portions projecting laterally thereof, and means secured to the building wall cooperable with the said projecting portions for guiding the member from one position to another, said guide means and projecting portions being also cooperable to prevent upward movement of the upper portion of the rigid member when in awning position and outward movement thereof when in shutter position.

12. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be disposed in an elevated and inclined position above said opening to serve as an awning for the latter, means secured to the building wall above the window opening engageable with said rigid member to support the latter in elevated position, said member being rectilinearly movable from shutter position into position to be engaged with said supporting means, and means interposed between the building wall and rigid member for maintaining the latter in an inclined position.

13. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be disposed in an elevated and inclined position above said opening to serve as an awning for the latter, means secured to the rigid member adjacent the upper portion thereof, means secured to the building wall above the window opening for cooperating with said first-named means to support the rigid member in elevated position, said member being rectilinearly movable from shutter position into position to be supported in elevated position, and means for maintaining the rigid member in inclined position, the upper portion of the rigid member when in elevated and inclined position being in engagement with the adjacent portion of the building wall.

14. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, means for supporting the rigid member in elevated position involving a T-shaped member secured to the building wall and an angle-shaped member secured to the rigid member, and means for maintaining the rigid member in inclined position.

15. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, means for maintaining the rigid member in elevated position involving a T-shaped member secured to the building wall and an angle-shaped member secured to the rigid member, means on the building wall cooperable with the outer ends of the angle member for guiding the upper portion of the rigid member as it is being moved from one position to another, said guiding means being connected to the T-shaped member and serving to prevent upward movement of the upper portion of the rigid member when the latter is in awning position.

In testimony whereof I affix my signature.

CHARLES F. MILLER.