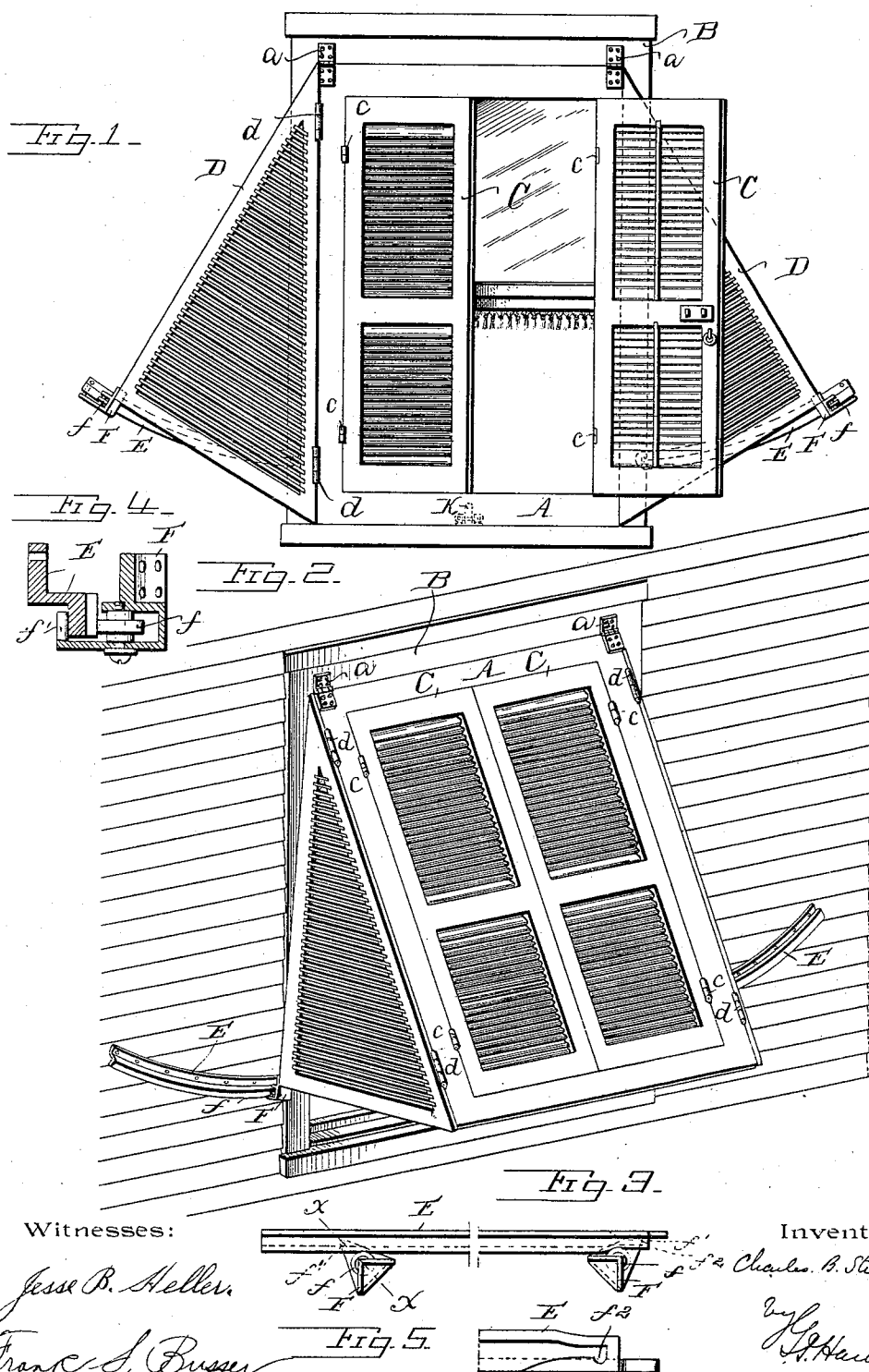


(No Model.)

C. B. STILWELL.
WINDOW BLIND AWNING.

No. 564,413.

Patented July 21, 1896.



Witnesses:

Jesse B. Heller

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Fig. 5.

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UNITED STATES PATENT OFFICE.

CHARLES B. STILWELL, OF PHILADELPHIA, PENNSYLVANIA.

WINDOW-BLIND AWNING.

SPECIFICATION forming part of Letters Patent No. 564,413, dated July 21, 1896.

Application filed September 12, 1893. Serial No. 485,316. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. STILWELL, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Window-Blind Awnings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

I will first describe my improvement as embodied in the preferred form, and then particularly point out what I claim to be novel in the claims thereof.

In the drawings, Figure 1 is a front elevation showing my improved device when the same is being used as an ordinary shutter. Fig. 2 is an isometric perspective view showing the same when used as an awning. Fig. 3 is a detailed view of track attached to the house and bracket attached to the wing of my improved device. Fig. 4 is a section on the line $x\ x$, Fig. 3. Fig. 5 is a detailed view of one end of one of the tracks.

In carrying out my invention I preferably use what I denote as a "supplemental frame" A, which is attached by hinges a , at its upper end, to the frame B of the window.

C are shutters, which, as shown, are of the ordinary type now in use, although in carrying out my invention the specific character and construction of these shutters is not material. The shutters are hinged, as shown, to the vertical sides of the frame A, at the point c .

Hinged to the frame A are wings D, which are triangular in form and preferably provided with a slatted surface. These wings are secured to the frame A by hinges d , being secured to the vertical sides of said frame. Preferably I use a wing upon each side of the frame corresponding to the shutters, but my improvement could be carried out by the use of a single wing if the use of two wings were either unnecessary or undesirable.

E is a track or bracket (shown clearly in cross-section in Fig. 4) which is secured to the side of the house adjacent to the window.

F is a bracket secured to the wings, as shown, at the projecting angle of said wing, although the exact position or point of secur-

ing this bracket to the wing is not material provided it is secured at or about the point indicated in the drawings. Connected to the bracket F is the roller f , in such a position as to rest upon one side of track E. Secured also to this bracket F is the pin f' , which projects and extends on the opposite side of the track E to that of the roller f , and projects in a direction parallel to the axis of the roller f .

The track E, as shown in the drawings, is curved, the purpose of which curvature will be more particularly pointed out in describing the operation of the device. At the end of the track nearest the window, and upon the pin side, is the notch f^2 , (see Fig. 5,) the purpose of which will be more particularly described in the operation of the device.

When the window-blind awning is to be used as an ordinary blind or shutter, the various parts are in the position shown in Fig. 1, when the shutters or blinds C may be swung around and open in the ordinary manner that shutters are now used, Fig. 1 showing one of the shutters open and the other closed, and wings D resting out of the way.

When it is desired to use this device as an awning, the two shutters C are closed, and preferably secured in that position by means of a bolt or any other device. The supplemental frame A is then pushed outward upon its hinged points a , which causes the said frame, and with it the shutters C, to assume the position shown in Fig. 2. The wing D, being secured to the frame A, partakes of this same motion; but, being pivotally secured thereto, the free end of said shutter swings inward toward the window until the outer surface comes in line with the window-frame, when it fills up the gap between the projecting shutters and the window-frame, and forms the sides of the awning, the shutters C forming the face or front of the awning. Where two wings are used, the operation of each wing is the same as that described in reference to one of the wings, and the two wings form the two sides of the awning.

When it is desired to again use the device as a blind and not as an awning, the frame A is allowed to swing inward, which reverses the movement before described. The roller f , secured to the wing D, as described, and

traveling upon the track E, forms a support for the wing, the frame A, and the shutters C in their outward and inward movement, and also reduces the power necessary to push them out and return them.

As before described, the track E is curved, and the curvature is such that during the whole movement of the wing D the wheel f will rest upon the track, but the movement of the wing is such that when the device is being returned from acting as an awning to that of a blind the pin f' is forced at or about the point of the extreme return movement against the track E, clamping the wing in that position. As before described, at the inner end of the track is the notch f^2 , and when the device is changed from a blind to an awning and the roller and pin travel to the point of the notch the pin drops into that notch, locking the device when in the position of an awning. Of course, when the device is in the position shown in Fig. 1, the supplemental frame A is secured in a fixed position with reference to the window-frame by any means desired, as, for instance, the latch K.

I have described the construction and operation of the preferred form of my invention, but I do not intend to limit myself to the precise connections of the wings and shutters and window-frame; but the essence of my invention consists in the use of shutters or blinds, and so connecting them to a fixed part of the window-frame or some fixed point connected with the window that said shutters may swing on a horizontal axis from the upper portion of said shutters, so as to assume an inclined position with reference to the window and act as the face of an awning, and to so connect the wing or wings with the shutters that the wing or wings shall partake of this movement at the same time the wing or wings shall have an independent movement toward the window, so as to close up the gap formed between the shutters and the window and to form the sides of an awning, this latter movement being guided at the free portion of the wing or wings by means of a fixed guiding-surface upon which said portion of the wing rests and moves, so that at all times the proper position of the wings with relation to the blinds and house is maintained.

Of course, under some circumstances, the wings might be dispensed with, in which case the use of the supplemental frame and its method of connection would still be within my invention.

Having now fully described my invention, what I claim, and desire to protect by Letters Patent, is—

1. The combination with a frame hinged on a horizontal axis, of a triangular wing, one side of which is hinged to said frame on a vertical axis, of a bracket secured to said wing, a wheel secured to said bracket, a track on which said wheel rests, the track being curved as described so that the wheel rests on said track throughout the movement of said

wing, a pin secured to said bracket and projecting adjacent to the track at the opposite side from the wheel, whereby in the extended position of the wing the pin is brought against the track locking the wing.

2. The combination with a frame hinged on a horizontal axis, and a triangular wing, one side of which is hinged to said frame on a vertical axis, of a bracket secured to said wing, a wheel secured to said bracket, a track on which said wheel rests, the track being curved as described, so that the wheel rests on said track throughout the movement of said wing, a pin secured to said wing and projecting adjacent to the track on the opposite side from the wheel, a notch in said track on the pin side, in which said pin is adapted to drop in extended position of the wing.

3. In combination with a frame hinged on a horizontal axis, of a roller, a hinged connection between said roller and the frame, a fixed surface upon which said roller rests, whereby when the frame swings on the horizontal axis the roller travels on the surface.

4. The combination of a frame hinged on a horizontal axis, and a wing hinged to said frame on a vertical axis, of a roller connected to said wing, a fixed surface on which said roller rests, said surface being so constructed that the wheel will rest upon said surface throughout the movement of the wing.

5. The combination with a frame hinged on a horizontal axis, of a triangular wing, one side of which is hinged to said frame on a vertical axis, and a fixed guiding-surface upon which said wing, at or about the point of the angle opposite the hinged side travels.

6. The combination with a frame hinged on a horizontal axis, of a triangular wing, one side of which is hinged to said frame on a vertical axis, a fixed guiding-surface, and a device secured to said wing, at or about the point of the angle opposite its hinged side, said device being adapted to rest upon and travel on said guiding-surface.

7. The combination with a frame hinged on a horizontal axis, of a triangular wing, one side of which is hinged to said frame on a vertical axis, a fixed guiding-surface, and a device secured to said wing at or about the point of the angle opposite its hinged side, said device being adapted to rest upon and travel on said guiding-surface, and a guard to hold said device in contact with said guiding-surface.

8. The combination with a frame hinged on a horizontal axis, of a triangular wing, one side of which is hinged to said frame on a vertical axis, a fixed guiding-surface, and a device secured to said wing at or about the point of the angle opposite its hinged side, said device being adapted to rest upon and travel on said guiding-surface, a guard to hold said device in contact with said guiding-surface, and means for locking said wing at one end of its travel on said guiding-surface.

9. The combination with a frame hinged on

a horizontal axis, of a triangular wing, one side of which is hinged to said frame on a vertical axis, and a fixed guiding-surface on which the free portion of said wing travels.

5 10. The combination with a frame hinged on a horizontal axis, of a triangular wing, one side of which is hinged to said frame on a vertical axis, a fixed guiding-surface, and a device secured to the free portion of said wing, said device resting upon and adapted to travel on said fixed guiding-surface.

15 11. The combination with a frame hinged on a horizontal axis, of a triangular wing, one side of which is hinged to said frame on a vertical axis, a fixed guiding-surface, a device secured to the free portion of said wing, said device resting upon and adapted to travel on said fixed guiding-surface, and a guard to

hold said device in contact with said guiding-surface.

20 12. The combination with a frame hinged on a horizontal axis, of a triangular wing, one side of which is hinged to said frame on a vertical axis, a fixed guiding-surface, a device secured to the free portion of said wing, said device resting upon and adapted to travel on said fixed guiding-surface, and a guard to hold said device in contact with said guiding-surface, and means of locking said wing at one end of its travel on said guiding-surface.

30 In testimony of which invention I have hereunto set my hand.

CHAS. B. STILWELL.

Witnesses:

FRANK S. BUSSEY,
JOHN T. CARR.