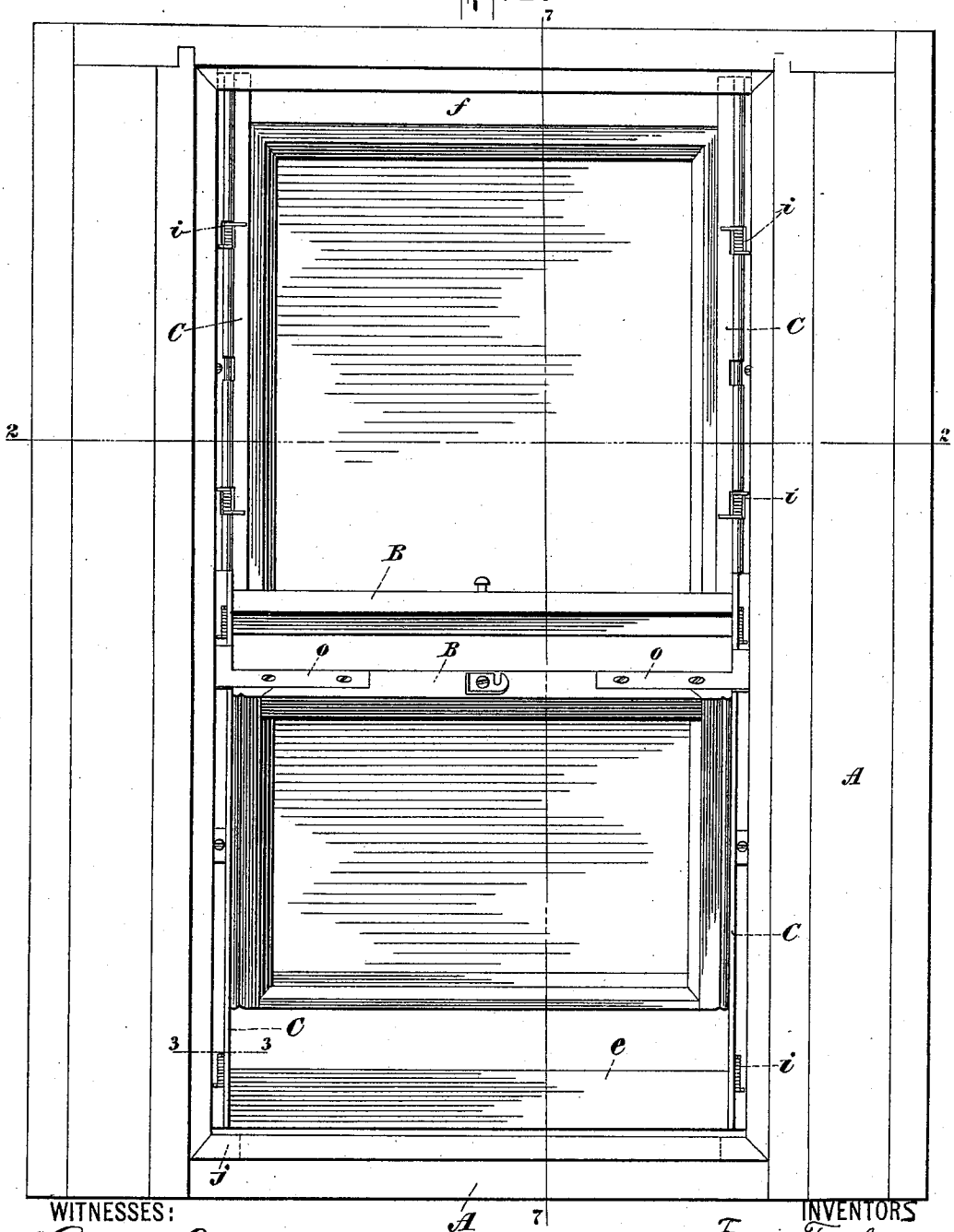
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F. FAERBER, L. BECK & M. WUNDT.

SLIDING AND SWINGING WINDOW.

No. 588,700. Patented Aug. 24, 1897.

Fig. 1.



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Fig. 2.

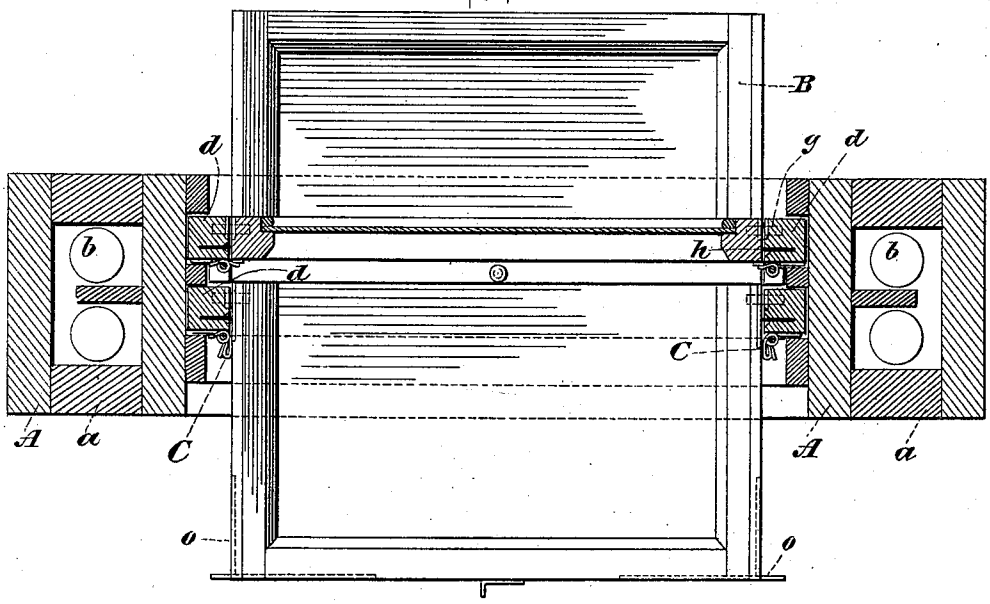


Fig. 3.

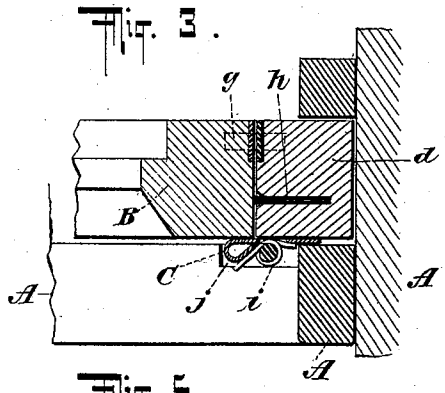


Fig. 4.

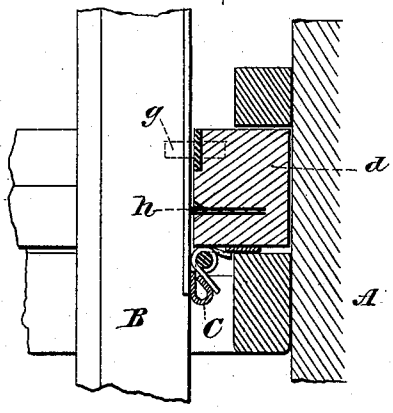


Fig. 5.

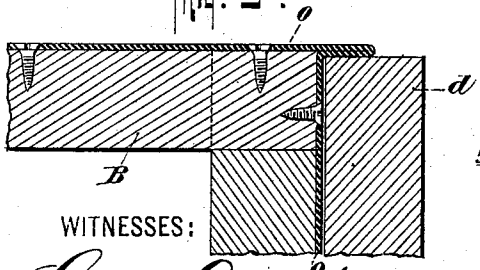
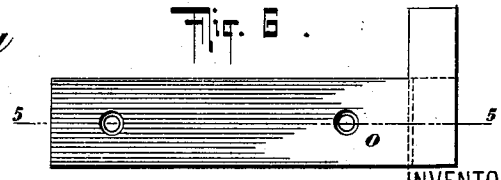


Fig. 6.



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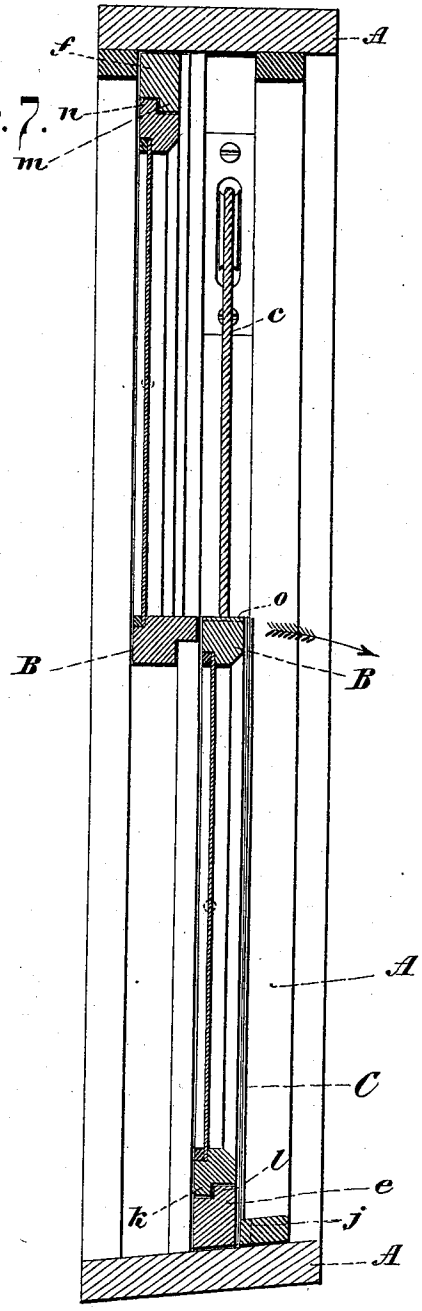
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Fig. 7.



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UNITED STATES PATENT OFFICE.

FRANCIS FAERBER, LEOPOLD BECK, AND MICHAEL WUNDT, OF NEW YORK, N. Y.

SLIDING AND SWINGING WINDOW.

SPECIFICATION forming part of Letters Patent No. 588,700, dated August 24, 1897.

Application filed May 15, 1897. Serial No. 636,628. (No model.)

To all whom it may concern:

Be it known that we, FRANCIS FAERBER, LEOPOLD BECK, and MICHAEL WUNDT, residents of the city, county, and State of New York, have invented certain new and useful Improvements in Sliding and Swinging Windows, of which the following is a specification.

Our invention relates to sliding and swinging windows—that is to say, to windows wherein the sashes are adapted to slide in the casing in the ordinary manner, and which may, when desired, be rotated around pivots, so that the outside of the windows may be readily turned inside for the purpose of cleaning or glazing, &c., from the inside without removing the sashes.

The object of our invention is to produce sliding and swinging windows which are simple in construction, cheap to manufacture, and efficient in use, and which may be readily swung on their pivots or made to slide in their frames without in any way adjusting, changing, or removing any of the parts.

To these ends our invention consists in the novel arrangement and combination of parts hereinafter described and claimed.

In the accompanying drawings, wherein like characters represent corresponding parts in the various views, Figure 1 is a face view of a window and its framing embodying our invention, the lower window in this view being shown turned to an inclined position on its pivots. Fig. 2 is a transverse sectional view on the line 2 2, Fig. 1. Fig. 3 is an enlarged sectional detail view on the line 3 3 of Fig. 1. Fig. 4 is a like view of the same with the parts in a different position. Fig. 5 is an enlarged sectional detail view of parts hereinafter to be more fully described. Fig. 6 is a detail top view of the angle-iron *o*. Fig. 7 is a central vertical sectional view of a window made in accordance with our invention.

In the drawings, A represents the framing of a window, in which is provided the usual receptacles *a* for the weights *b*, which are connected up by means of cords *c* with sliding side battens *d*. The sliding side battens of the lower window are connected at the bottom by a cross-piece *e*, and the sliding battens of the top window are connected at the top by a cross-piece *f*. In these sliding side battens are pivoted window-sashes B, as indicated at *g*. The connection of the sash with the side battens likewise constitutes an additional means for bracing and maintaining said sliding battens in place. If desired, these sliding battens may be provided with weather-stripping *h*, which bears against the side edges of each sash. To each of the sliding battens *d* is secured a hinged batten C, which is adapted to extend over the joint formed between the side battens and a sash. These battens are normally maintained in the position illustrated in Fig. 3 by coil-springs *i*. In the lower window the hinged battens are adapted to be received in apertures *j*, formed in the lower portion of the casing A when the sash is in line with the sliding battens and the window is in the lowermost position. By this means it will be observed that the hinged battens are automatically locked and prevented from moving on their hinges when the lower window is in its lowermost or closed position and that the window will thereby be prevented from swinging on its pivots.

Special reference being had to Fig. 7, it will be observed that a shoulder *k* on the lower rail of the lower sash abuts against a shoulder *l* on the cross-bar *e*, which unites the sliding side battens of the lower window, so that the window can only swing from the top inward. The cross-bar *f*, uniting the sliding side battens of the upper window, is likewise provided with a shoulder *m*, against which a shoulder *n* on the sash of the upper window is adapted to abut, whereby the upper window can only swing from the bottom inward. By this arrangement it will be seen that when the sash of the lower window is locked by securing the swinging batten against movement in the recess *j* the lower window will stand in the path of the upper window and prevent the same from swinging on its pivots, whereas the lower sash is locked from movement on its pivots by the hinged batten itself. On the top rail of the lower sash we prefer to secure an angle-iron *o*, which extends downwardly along the side rail of the sash, as indicated in Fig. 5, to strengthen the joint. This angle-iron pro-

jects over the top of a sliding side batten, as clearly shown in Fig. 5, to cover the joint formed between the sliding side batten and the window-sash when the windows are closed.

It will be observed that by our invention pressure may be exerted upon the windows in the direction of the arrow, Fig. 7, when the lower sash has been slightly raised to release the hinged batten from the recess *j* in which it is held to cause the windows to turn on their pivots. The pressure exerted upon the windows is sufficient to force aside the hinged battens against the tension of their springs. The spring tension of these battens, however, acts to secure the windows in any position to which they are moved around their pivots. When the sashes are restored to their normal position wherein they are in line with the sliding side battens, the spring-pressed hinged battens are automatically restored to their normal positions, as illustrated in Fig. 7, and at the upper portion of Fig. 1.

It is obvious that instead of mounting the hinged batten upon the sliding side battens they may be mounted upon the sashes of the windows. However, we prefer to mount the hinged battens in the manner shown and described.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a sliding and swinging window, the combination of sliding side battens, a window-sash pivoted thereto, and spring-pressed hinged battens carried by said sliding battens and adapted to bear against the window-sash, the tension of the springs of the hinged battens being exerted to maintain said hinged battens in contact with the window-sash.

2. In a sliding and swinging window, the combination of sliding side battens, a window-sash pivoted thereto, and spring-pressed hinged battens carried by said sliding battens and adapted to overlap the joints between the sliding battens and the sash when the sash is in line with the sliding battens, the tension of the springs of the hinged battens being exerted to maintain said hinged battens in contact with the window-sash.

3. In a sliding and swinging window, the combination of sliding side battens, a window-sash pivoted thereto, a hinged batten carried by and adapted to move with said window, said hinged batten extending between the window-sash and the sliding side battens, and means for automatically securing said hinged batten against movement when the sash is in line with the sliding battens and the window is closed.

4. In a sliding and swinging window, the combination of sliding side battens, a window-sash pivoted thereto, a hinged batten carried by and adapted to move with said window, said hinged batten extending between the window-sash and the sliding side battens, and a frame having a recess therein in which the hinged batten is adapted to seat itself and be locked against movement when the window is closed.

5. The combination of an upper sliding and swinging window adapted to swing in from the bottom, a lower sliding and swinging window adapted to swing in from the top, the upper end of the lower window standing in the path of the lower end of the upper window when the windows are closed, and means for securing the lower window against movement around its axis when the windows are closed.

6. The combination of an upper sliding and swinging window adapted to swing in from the bottom, a lower sliding and swinging window adapted to swing in from the top, the upper end of the lower window standing in the path of the lower end of the upper window when the windows are closed, said lower window comprising sliding side battens, a window-sash pivoted thereto, a hinged batten carried by said window, and means for securing the hinged batten against movement.

7. The combination of an upper sliding and swinging window adapted to swing in from the bottom, a lower sliding and swinging window adapted to swing in from the top, the upper end of the lower window standing in the path of the lower end of the upper window when the windows are closed, said lower window comprising sliding side battens, a window-sash pivoted thereto, a hinged batten carried by said window, and a frame having a recess therein in which the hinged batten is adapted to seat itself and be locked against movement when the lower window is closed.

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