J. H. BEARD
Guide for Sash and Doors.

No. 197,813. Patented Dec. 4, 1877.

Fig. 1.

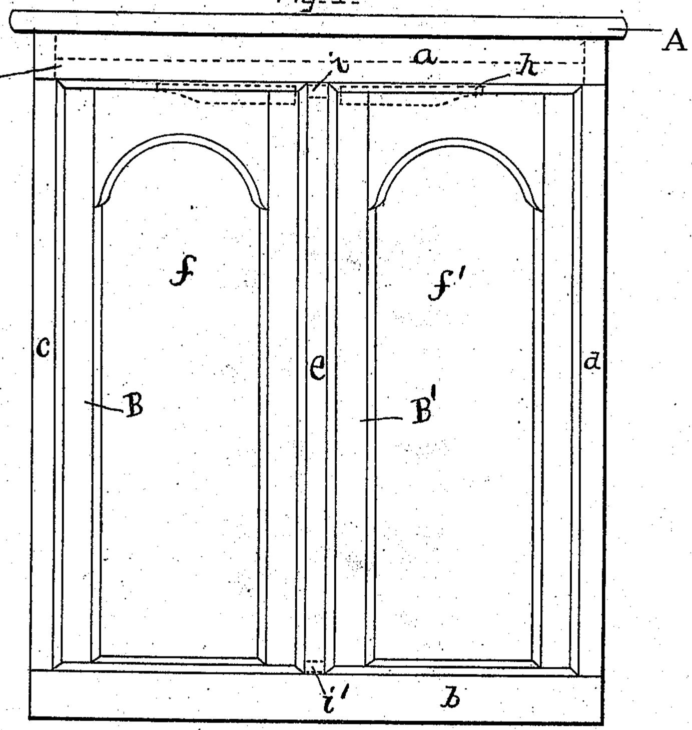


Fig. 2.

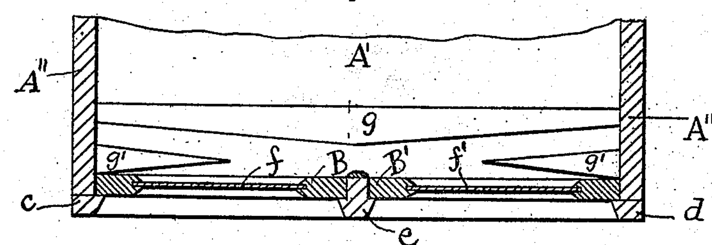


Fig. 3.

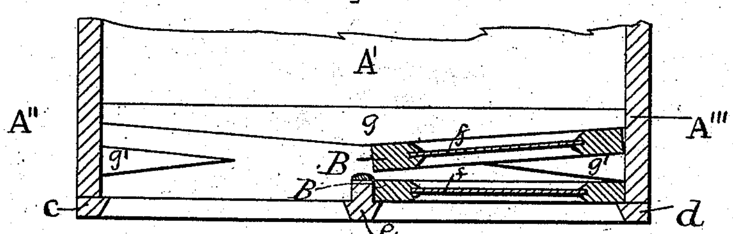
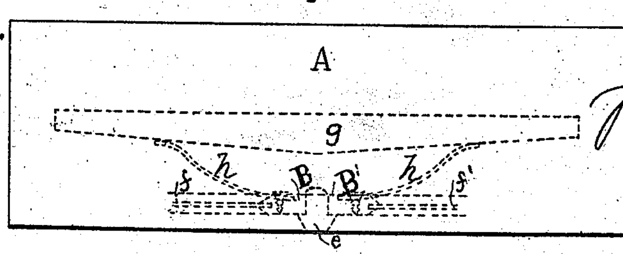


Fig. 4.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHNSON H. BEARD, OF PROVIDENCE, KENTUCKY.

IMPROVEMENT IN GUIDES FOR SASHES AND DOORS.

Specification forming part of Letters Patent No. **197,813**, dated December 4, 1877; application filed September 3, 1877.

To all whom it may concern:

Be it known that I, JOHNSON H. BEARD, of Providence, Webster county, Kentucky, have invented certain new and useful Improvements in Guides for Sashes and Doors, of which the following is a specification, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention is designed to facilitate the sliding movement of a window or door, when it is desired to open or close the same; and consists of an arrangement of devices, hereinafter described, which admits of one of a pair of windows or doors being slid or passed behind the other one of the pair, and held there secure against rattling or jarring.

In the annexed drawings, forming a part hereof, Figure 1 is a front elevation of a pair of sliding windows embracing my improvements. Fig. 2 is a sectional plan of the same, showing both windows closed. Fig. 3 is a similar plan, showing one of the windows open. Fig. 4 is a top view of the window-frame with certain features of the invention in dotted lines, as hereinafter described.

Similar letters of reference indicate similar parts in all the views.

The window-frame is composed of the top A, the bottom A′, and the sides A″ and A‴. The top and bottom sash-strips are represented by *a* and *b*, and the side strips by *c* and *d*, the central or dividing strip being shown by *e*. B B′ are the two sash-frames, the glass panes of which are shown by *f f*′. The bottom A′ of the window-frame is provided with a main guide, *g*, tapered from its center toward each of its ends, which rest, respectively, against the inner surface of the respective sides A″ and A‴ of the window-frame. Wedge-shaped or tapered guides *g*′ are also placed on the bottom A′ of the window-frame, one joining with each of the sides A″ and A‴, the tapering side of each guide *g*′ next the guide *g* being nearly parallel thereto, as shown, the spaces between *g* and *g*′ constituting ways or paths for the windows, as hereinafter more particularly explained. The other tapered side of each guide *g*′ touches the inner surface of each of the sash-frames at the bottom thereof, the point of the wedge standing off therefrom a distance governed by the taper. A similar arrangement of guides is placed at the top of the sash-frames, the said guides being situated at the under side of the false top A⁴. At the top of each sash-frame, and at the back thereof, is attached a spring, *h*, the free ends of which springs rest against the respective inner tapering surfaces of the upper main guide, which corresponds with the lower main guide *g*. The disposition and arrangement of the upper wedge-shaped guides are the same as at the bottom of the sash-frame.

It will be observed that when both windows are closed, the springs *h*, bearing upon and exerting a force against the upper main guide, press the sash-frames forward in the rabbets formed by the strips *a b c d e* of the window-frame and against said strips.

When it is desired to open one of the windows, that portion of the sash-frame adjacent to the central or dividing strip *e* is pushed inward out of contact with and away from said central strip, (the movement being allowed by reason of the tapering space between the inner surface of the sash-frame and the wedge-shaped guide,) and when so forced is slid behind into the way or path formed by the guides situated in the rear of the other window, which remains closed while the one is open. This situation of the two windows is shown in Fig. 3.

It will be seen that as the opening window slides behind the closed one, the moving window passes between the free end of the spring *h* of the closed window and the upper main guide, and that when the limit has been reached the two compressed springs act together to keep both windows from jarring or rattling. As an additional precaution against such movement, gum blocks *i i*′ are placed at the respective ends of the central or dividing strip *e*, which blocks bear against the moving window during its passage, and also after it has been fully opened.

This invention is found to be convenient and reliable in its action, and can be cheaply constructed. It is apparent that it is equally applicable to sliding doors and windows for any purposes for which they are used.

Having described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

1. The combination, with a pair of sliding windows or doors, of the upper and lower wedge-shaped guides *g g*′ *g*′, whereby the win-

dows or doors, when both are closed, are in the same vertical line, and when one is opened it is brought behind the other, substantially as specified.

2. The combination, with a pair of sliding windows or doors, of the upper and lower wedge-shaped guides *g g' g'* and springs *h*, whereby, when one of the windows or doors is brought to its closed position, it is forced to a vertical line common to both, substantially as described.

3. The central strip *e* and gum blocks *i i'*, combined with the upper and lower wedge-shaped guides *g g' g'* and a pair of sliding doors or windows, substantially as described.

In testimony whereof I have hereto subscribed my name in the presence of two subscribing witnesses this 12th day of August, A. D. 1877.

JOHNSON H. BEARD.

Witnesses:
T. B. DORIS,
T. W. BARNHILL.