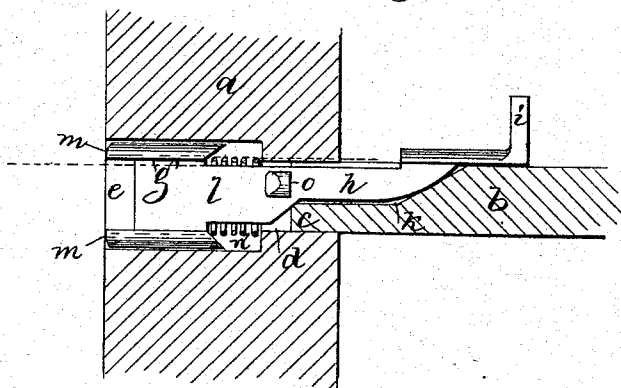


**B. DOE.**  
**Sash-Fasteners.**

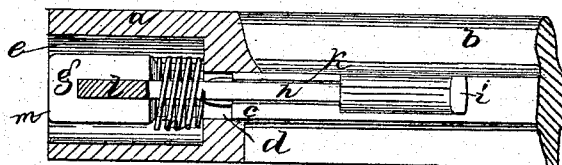
No. 156,778.

Patented Nov. 10, 1874.

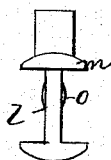
*Fig 1.*



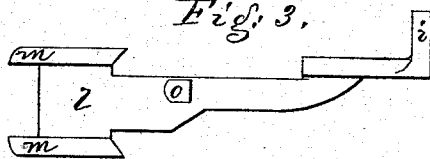
*Fig: 2.*



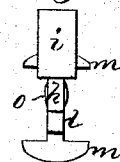
*Fig: 5.*



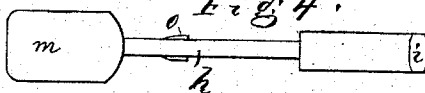
*Fig: 3.*



*Fig: 6.*



*Fig: 4.*



Witnesses:  
*W. R. Odell*  
*Geo T. Smallwood Jr.*

Inventor:  
*Bartlett Doe*  
per *J. J. Halsted*,  
Atty

# UNITED STATES PATENT OFFICE.

BARTLETT DOE, OF SAN FRANCISCO, CALIFORNIA.

## IMPROVEMENT IN SASH-FASTENERS.

Specification forming part of Letters Patent No. **156,778**, dated November 10, 1874; application filed April 7, 1874.

*To all whom it may concern:*

Be it known that I, BARTLETT DOE, of the city and county of San Francisco, in the State of California, have invented an Improved Sash-Fastener; and I do hereby declare that the following, taken in connection with the drawing accompanying and forming a part of these specifications, is a description of my invention sufficient to enable those skilled in the art to practice it.

The invention relates to that class of sash-fasteners in which a bolt passes through the sash-stile into or against the sash-frame.

The invention consists in the peculiar construction and details of construction of the bolt, adapted to be applied in putting the sash together, so that the bolt may be held by the framing of the sash.

The drawing represents the construction embodying my invention.

Figure 1 shows the sash-stile and bar in sectional elevation. Fig. 2 is a cross-section through the mortise for the tenon on the end of the sash-bar. Fig. 3 is a side elevation of the fastening. Fig. 4 is a plan of it. Figs. 5 and 6 are opposite end views of it.

*a* denotes the vertical sash-stile; *b*, the center bar or one of the bars of the sash. *c* is the tenon formed at the end of the bar for its connection with the stile. *d* is the mortise in the bar made for said tenon. Into the outer edge of the stile is sunk the hole *e*, for receiving the bolt end of the fastening, said hole being sunk deep enough to meet the mortise *d* made for the tenon *c*. *f* denotes the fastening, formed with a bolt end, *g*, and extending therefrom a thin shank, *h*, at the end of which is a handle, *i*. The shank is entered through the hole *e*, and passes through the mortise *d*, and into a groove, *k*, sunk in the top of the sash-bar, the handle *i* being above the plane of the shank, and sliding over the groove and on top of the bar. The bolt end is made with a vertical web, *l*, at the top and bottom of

which are heads or flanges *m*. By means of this web and flanges I obtain a large bearing-surface, that prevents the bolt from wearing the stile, and enables it to be readily operated. The shank is in the plane of this web, and by its form and its entrance into the vertical groove *k* the fastening is kept in position without tendency to become displaced as it is operated. The fastening may be pressed forward by a spring, *n*, and its side surface or surfaces may be formed with a shoulder, *o*, to strike the end of the tenon *c*, and limit the movement of the fastener. The sash-stile being made and mortised in the usual manner to receive the tenon *c*, and the sash-bar formed with its tenon in the usual manner for connection of bar and stile, the stile is mortised to receive the bolt, and the bar and stile are then framed together, the fastening being applied in putting together the sash, and the bar being grooved to receive the fastener-shank. The sash being made, of course, the fastener is not removable, but forms a fixed part of the sash.

I claim—

1. The sash-fastener formed with the heads or flanges *m*, united by the web *l*, and with the shank *h* and handle *i*, substantially as shown and described.

2. The fastener having the vertically-thinned shank *h*, for sliding in the guide-groove *k* of the sash-bar, substantially as described.

3. The sash-fastener having the handle *i*, arranged upon the top of the sash-bar to slide upon the same, substantially as shown and described.

4. In combination with the head *m*, shank *h*, and handle *i*, the stop or shoulder *o*, substantially as shown and described.

BARTLETT DOE.

Witnesses:

FRANCIS GOULD,  
M. W. FROTHINGHAM.