

(No Model.)

L. GERHARDT.
SASH CORD FASTENER.

No. 500,760.

Patented July 4, 1893.

Fig. 1.

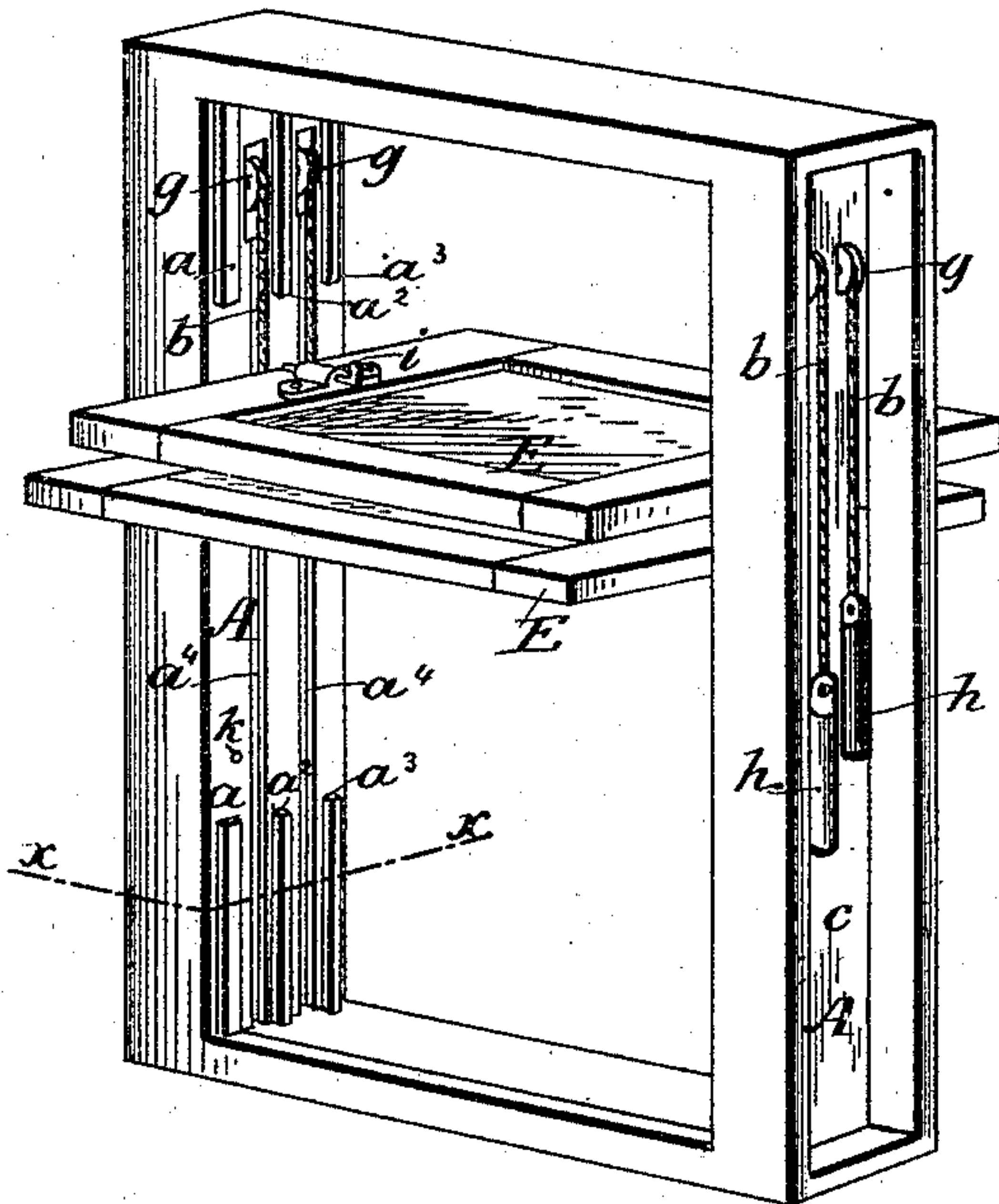


Fig. 3.

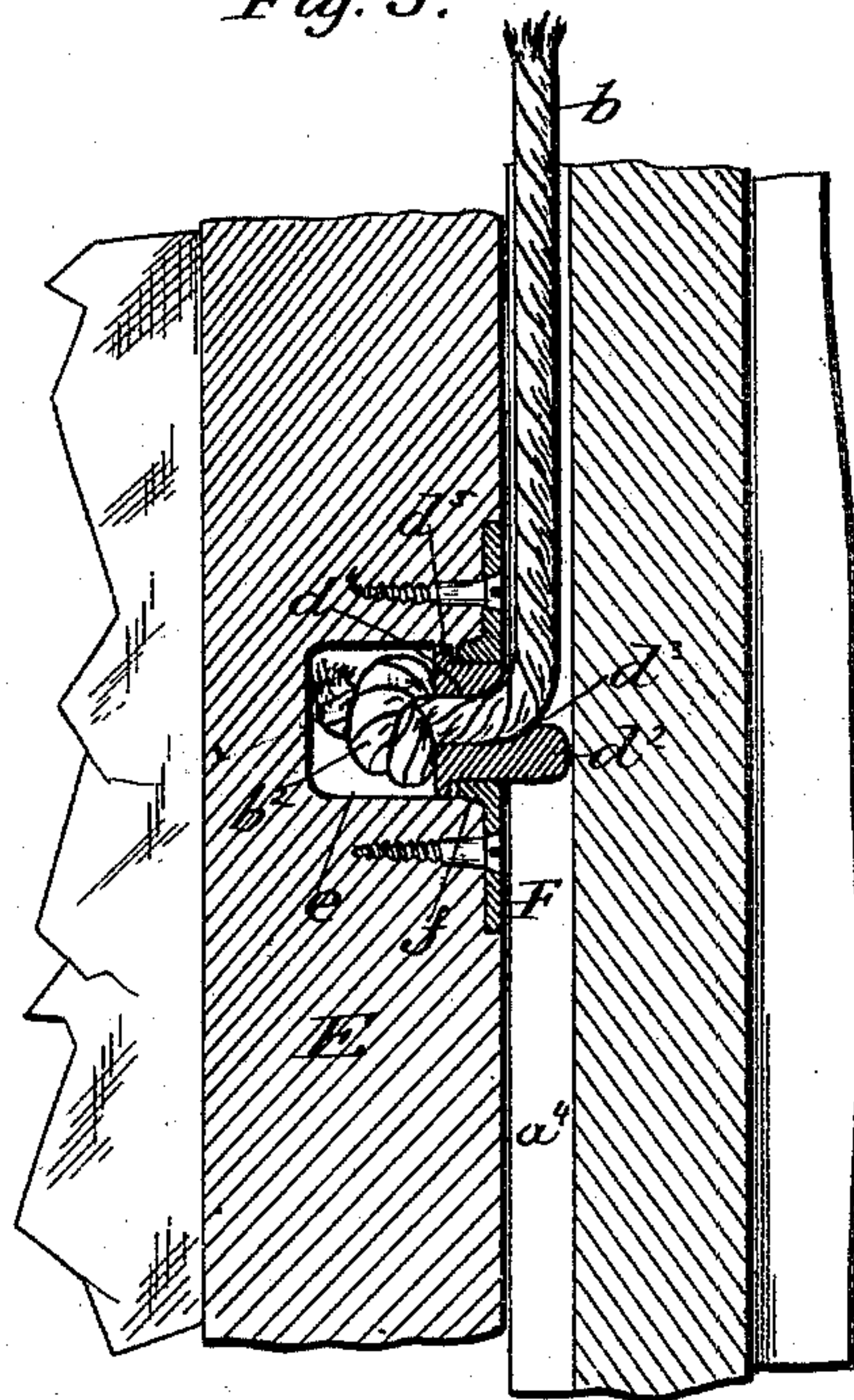


Fig. 2.

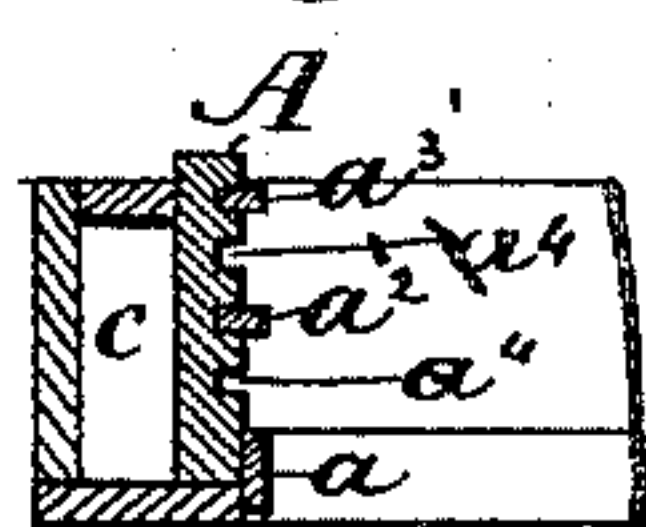


Fig. 4.

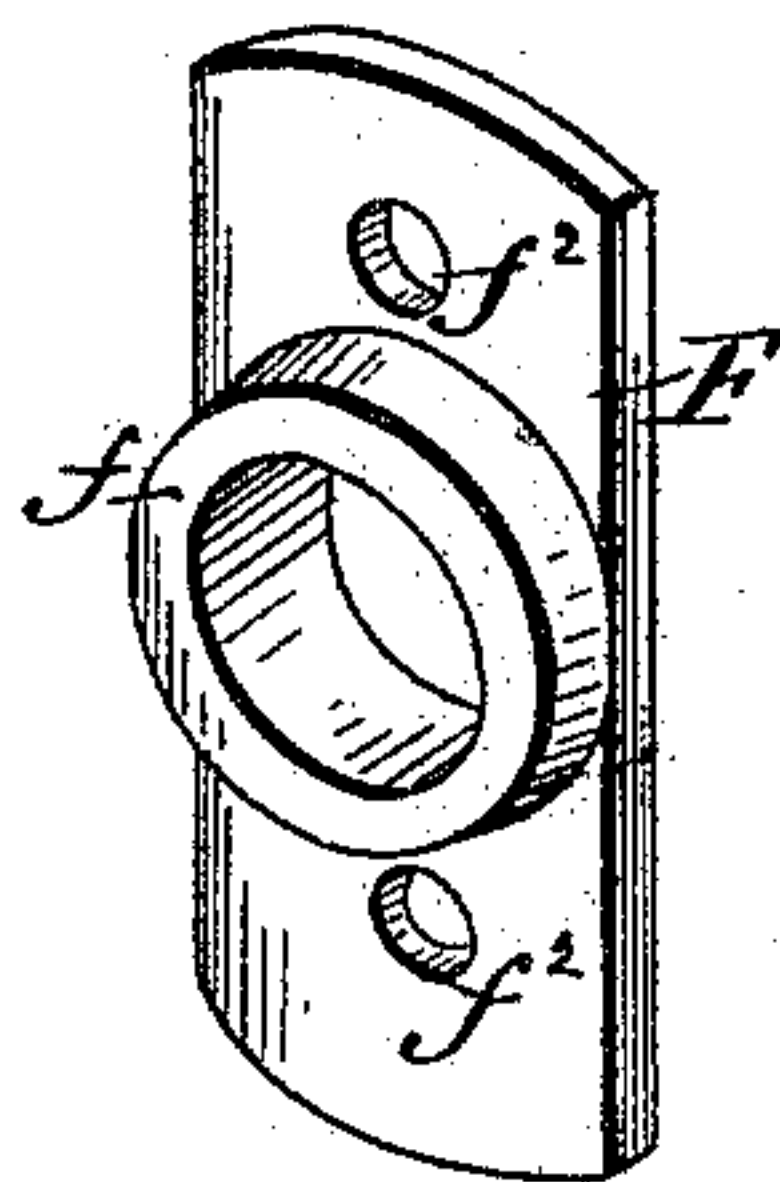
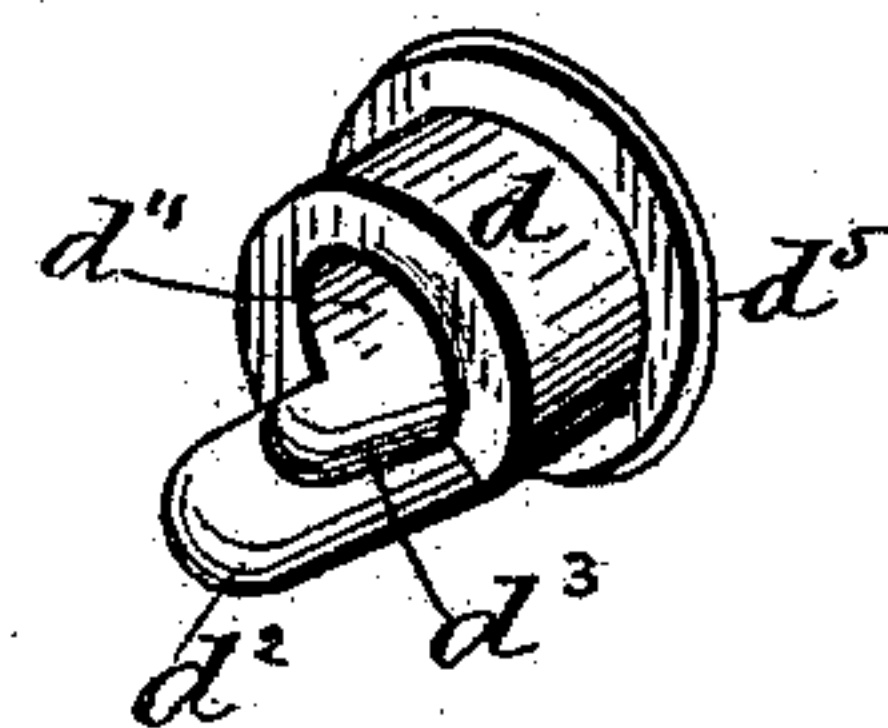


Fig. 5.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

LINCOLN GERHARDT, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR
OF ONE-HALF TO HARVEY B. VARNS, OF SAME PLACE.

SASH-CORD FASTENER.

SPECIFICATION forming part of Letters Patent No. 500,760, dated July 4, 1893.

Application filed April 3, 1893. Serial No. 468,855. (No model.)

To all whom it may concern:

Be it known that I, LINCOLN GERHARDT, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Sash-Cord Holders, Guides, and Fasteners, of which the following is a specification, reference being had therein to the accompanying drawings.

The objects of my improvement are to provide window sashes with simple and inexpensive means to not only secure one end of a sash cord thereto, but to permit the same means to be utilized to guide the sash vertically, said cord fasteners having also a metallic sash-pivot upon which it can be rotated, either to facilitate the cleaning of the sashes, or permit them to be elevated and retained within the sash-frame in a horizontal or in an inclined position as easily as in a vertical position. I attain these objects by the construction illustrated in the accompanying drawings in which—

Figure 1 is a perspective view of a window frame having sashes provided with sash-cord fasteners constructed in accordance with my invention. Fig. 2 is a horizontal section of the window frame on line xx of Fig. 1. Fig. 3 is a central vertical section through the sash cord fasteners constructed in accordance with my invention, said fastener being shown attached to a portion of a window sash, and its sash-pivot received in a vertical groove of the sash-frame. Fig. 4 is a perspective view showing the inner side of the cap plate used to retain the combined sash pivot and sash cord retainer. Fig. 5 is a perspective view of the combined sash cord retainer and sash-pivot.

In said drawings A represents the sides of a window frame provided with sash guiding strips a^1 and a^3 which are secured to the upper and lower portion of the sides A, the middle portions being preferably left without strips, although said middle portions may also be provided with easily removable strips in continuation of the strips a , a^2 , a^3 for use during the winter season, the length of said removable strips or the space between the ends of the two series of permanent strips a , a^2 , a^3 being substantially equal to the height of one of the sashes and the thickness of the other,

so that when the upper sash has been turned horizontally as shown in Fig. 1, but to the upper end of its course, the lower sash can then be also revolved on its pivots and pushed up horizontally under the upper sash. One of the advantages derived from placing the sashes in a horizontal position is the possibility to let air circulate through nearly the whole opening of the window frame during hot weather, particularly in factories where in a large number of operators are congregated, in public halls, &c. The same construction also provides larger openings to have access to fire escapes generally reached from windows. To guide the sashes when they are pushed up or down, or when they are revolved, vertical grooves a^4 are formed in the sides A of the frame midway between the strips a and a^2 , and also a^2 and a^3 . Said grooves are comparatively narrow and shallow being slightly larger than the diameter of the sash cord b . They neatly incase the latter and materially protect it from the action of the weather. But the main object of said grooves is to form guides for the pivots of the sash. Said pivots form a part of the sash cord retainer constituting my invention.

This cord-retainer consists of an annular portion d , having projecting from its outer end a finger d^2 , the outer periphery of which is substantially cylindrical but its inner portion is slightly gouged out (or turned off) at d^2 to facilitate the introduction of the sash cord within the annular portion, although retaining the finger d^2 as near the axis of the cord retainer as possible. Said finger d^2 acts as a pivot for the sash when the latter is held up by counterbalancing weights. After one end of the sash-cord has been introduced into the central cylindrical perforation d^4 of the cord retainer, a knot b^2 is formed on said end of the cord and it is placed, with the cord retainer, within a cavity e formed in each side of the sash E. To keep said parts within said cavity the inner end of the annular portion d of the cord retainer is provided with a flange d^5 . Said flange is made to abut against a collar f projecting from the inner face of a plate F, in the central opening of which the cord retainer can revolve. Said plate F with the cord retainer, completes the sash cord fas-

tener. The plate F is let in a shallow recess formed into the edge of the sash and is secured thereto by means of two screws received in perforations f^2 formed in the plate F. Each cord b is made to pass over a pulley g mounted in a bearing plate that is secured in a shallow recess formed in the side of the planks A of the window frame, and weights h are secured as usual to the outer end of the cord b . The weights are received in boxes c formed as usual on the wall-side of the window frame. The sashes being balanced by the weights, will normally remain in the position in which they are placed, for example as shown in Fig. 1, but to increase their stability against gusts of wind and lock them in any position, or even to lock the sashes to the frame after they have been returned to a vertical position, they can be provided with small bolts i mounted on said sashes and the end of said bolts be made to enter perforations k in suitable locations in the side boards A of the window frame.

Having now fully described my invention, I claim—

1. In a sash cord fastener the combination of an annular cord retainer having a flange around the inner end of its body and a pivot-finger d^2 projecting from its face, with a cap plate F encircling the body of said retainer and bearing against its flange substantially as described.

2. The combination of a sash cord fastener consisting of an annular cord retainer having a flange around its inner end, a pivot-finger d^2 projecting from its face and a cap plate encircling the body of said retainer, with a sash carrying said sash cord fastener and a window frame having a vertical groove in its side to receive and guide the pivot-finger of the sash cord retainer substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

LINCOLN GERHARDT.

Witnesses:

E. E. MASSON,
A. B. DEGGES.