(No Model.)

F. S. HEISER.

SASH CORD FASTENER.

No. 303,730. Patented Aug. 19, 1884.

Fig. 1.

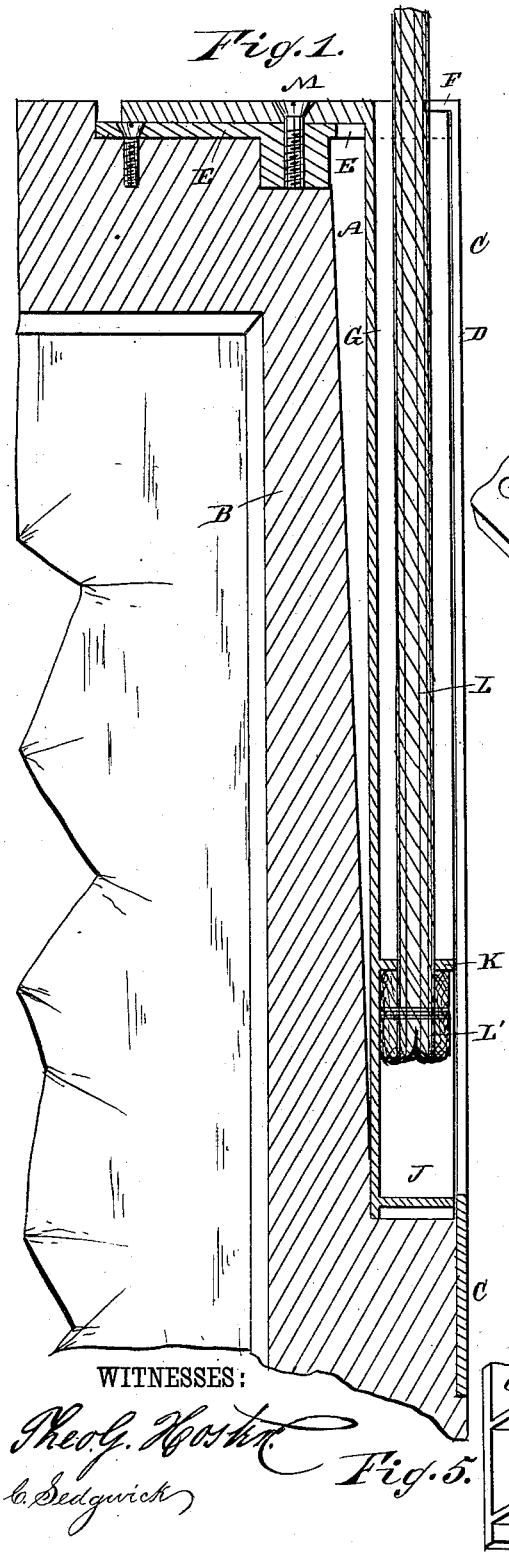


Fig. 2.

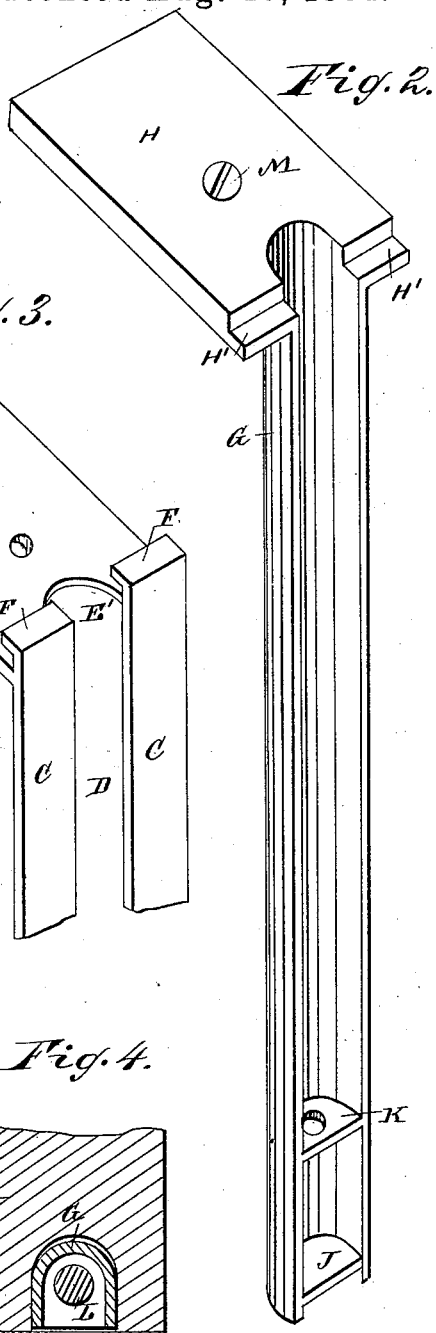


Fig. 3.

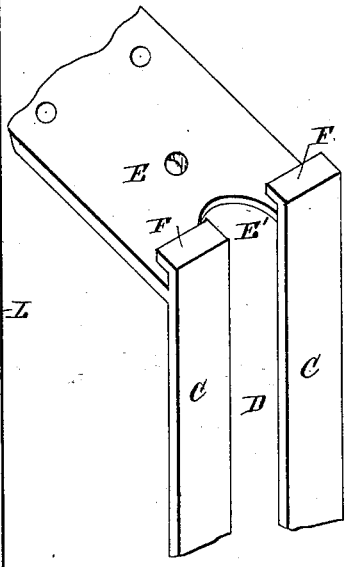


Fig. 4.

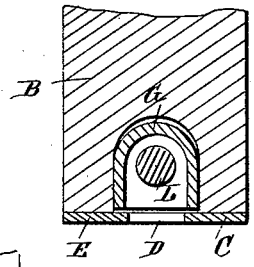
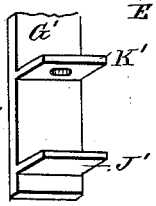


Fig. 5.



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FREDERICK S. HEISER, OF BROOKLYN, NEW YORK.

SASH-CORD FASTENER.

SPECIFICATION forming part of Letters Patent No. 303,730, dated August 19, 1884.

Application filed October 3, 1883. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK S. HEISER, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Sash-Cord Fastener, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved device for attaching the balance cord or chain to a window or other sash in such a manner that the cord can be fastened to the sash without requiring the sash to be removed from the frame.

The invention consists in a rod or plate adapted to be held in the side bar of a sash, which rod or plate is provided with means for fastening the cord or chain near its lower end, and is of such length that in any position of the sash the cord will be free to pass over the pulley, and which plate or rod can be withdrawn from the top of the sash, thus permitting of securing the balance-cord to the sash without requiring the latter to be removed from its frame.

The invention also consists in parts and details, as will be fully set forth hereinafter.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of part of sash provided with my improved balance-cord fastener. Fig. 2 is a perspective view of the removable plate. Fig. 3 is a perspective view of part of the retaining-plate which is fixed on the sash. Fig. 4 is a horizontal sectional view of one side rail of the sash. Fig. 5 is a detail of a modification.

A groove, A, is cut in the outer edge of the side bar, B, of the sash, which groove increases in depth from the lower toward the upper end. A retaining-plate, C, is provided with a longitudinal slot, D, extending to the top and near the upper end of the plate C. A plate, E, is made integral with the same at right angles, which plate E is provided with a recess or notch, E', at the slot D. The shanks formed by the slot D project above the top plate, E, and form two lips, F. The united plates C E are secured to the top and side of the sash by screws, as shown in Fig. 1, both plates being let into the sash, as shown. A trough-shaped plate, G, or rod projects downward from a plate, H, fitting on the plate C, which plate H is provided with a rabbet, H', at the edge at which the piece G is united with it, on which rabbet the lips F fit. The U or trough shaped plate G is provided with a cross-piece, J, at the lower end, and with an apertured cross-piece, K, a short distance above the lower end. The end of the balance cord or chain L is passed through the aperture in the cross-piece K, and a knot or head, L', is formed on the end of the cord below the cross-piece K. The plate G is then passed into the groove A from the top, and its upper end is moved toward the side of the sash, so that the lips F will pass upon the rabbet H', and thus hold the outer end of the plate E down. A screw, M, is then passed through the plate H into the top of the sash or into a block formed on the under side of the plate E. The cord will thus be held to the sash at a point which in any position of the sash will be below the pulley in the frame, and can be fastened to the same without requiring the sash to be removed from its frame. The slot D in the plate C is made narrower than the longitudinal opening of the U-shaped plate G, so that the edges of the plate G rest against the inner surface of the plate C, and the plate is thus retained in place, as shown in Fig. 4; but as the cross-piece J bears against the lower part of the retaining-plate C below the slot D, this is not essential. If the sash-cord breaks, the bottom cross plate or piece, J, prevents the knot and the broken-off end of the cord from dropping out of the piece G.

The balance-cord can pass out of slot D when the top of the sash is raised above the pulley, and can pass into the same when the sash is lowered. The piece G can be easily withdrawn from the top of the sash in case the cord is to be detached.

The device can be used with cords, chains, or straps.

In the modification shown in Fig. 5 a flat plate, G', is shown, having an apertured lug, K', and a lug, J'.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with a sash recessed on its edge, of a retaining-plate secured to the side and top of the same, and partially inclosing said recesses, and of a plate or rod adapted

to be passed within the recess formed between the said retaining-plate and the edge of the sash from the top of the latter, to which plate or rod the sash-cord can be fastened, substantially as herein shown and described.

2. The combination, with the slotted plate C and the plate E on which lips F are formed, of the plate G and top plate, H, having a rabbet, H′, substantially as herein shown and described.

3. The combination, with the slotted plate C and the plate E, provided with lips F, of the plate G, the top plate, H, having rabbet H′, the apertured cross-piece K, and the plate J, substantially as herein shown and described.

FREDERICK S. HEISER.

Witnesses:
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