(Model.)

S. N. CHAPIN.

SASH FASTENER.

No. 332,325. Patented Dec. 15, 1885.

Fig. 1.

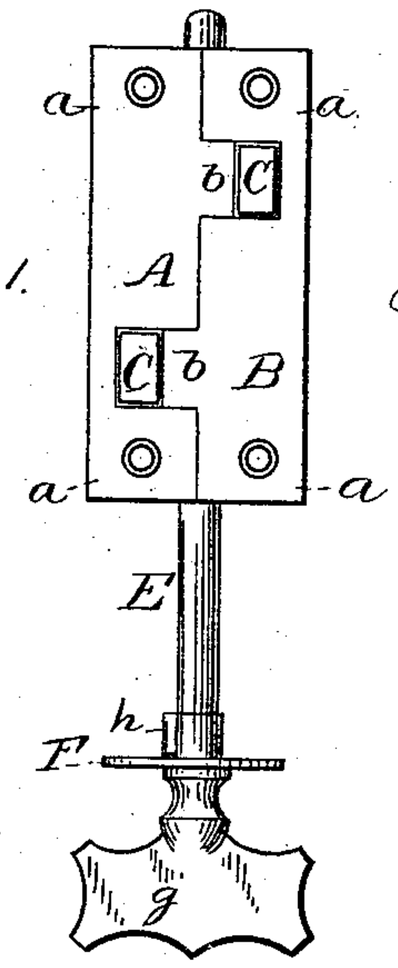


Fig. 2.

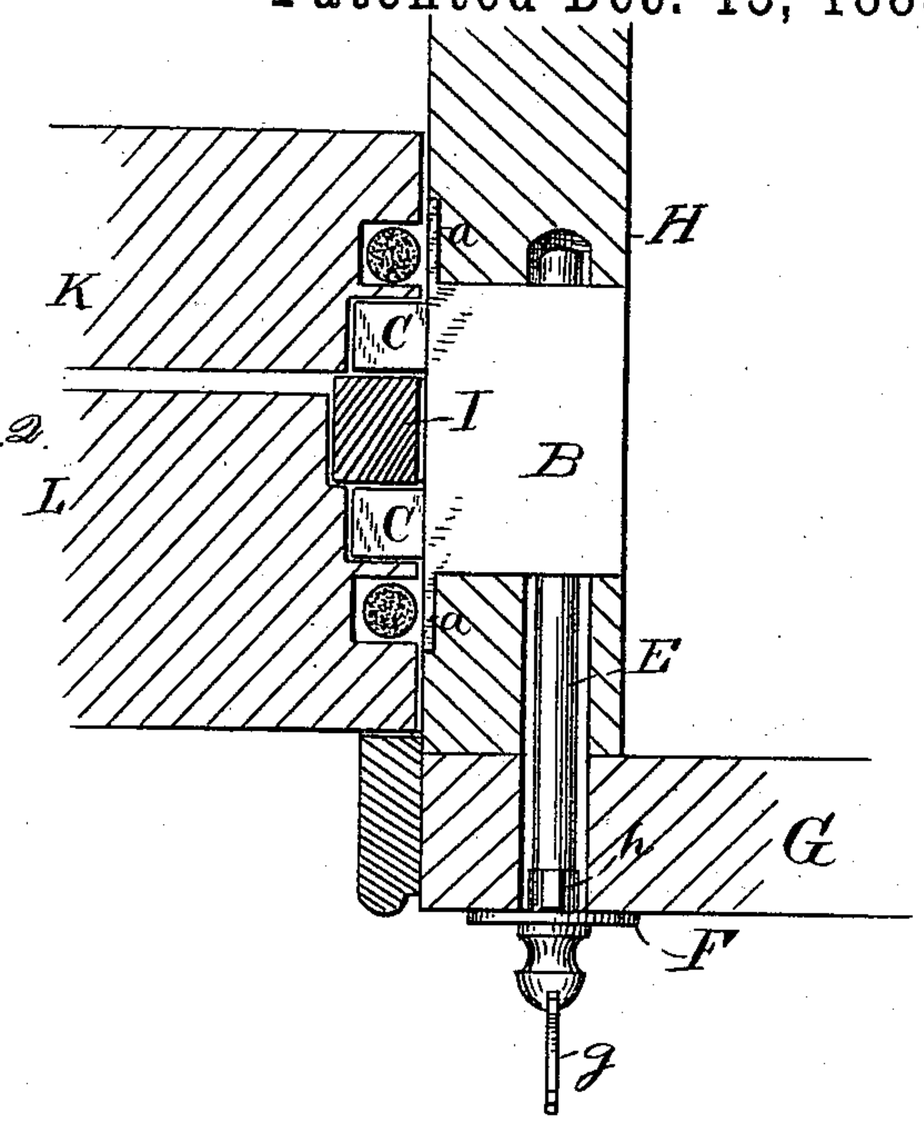


Fig. 3.

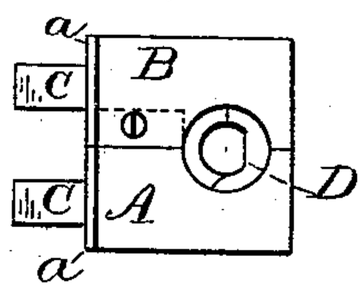


Fig. 4.

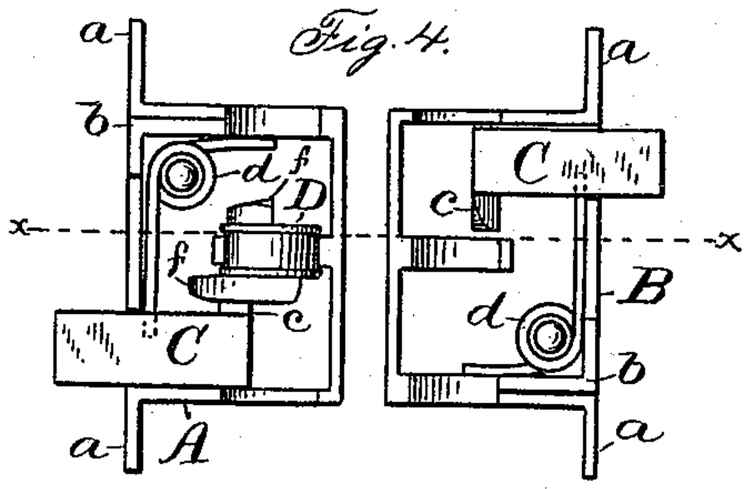


Fig. 6.

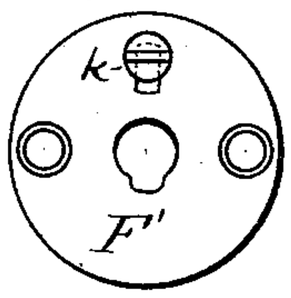


Fig. 5.

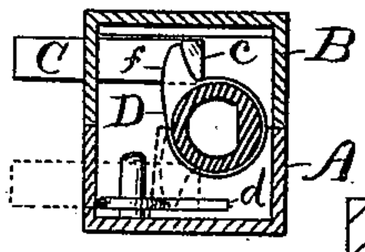
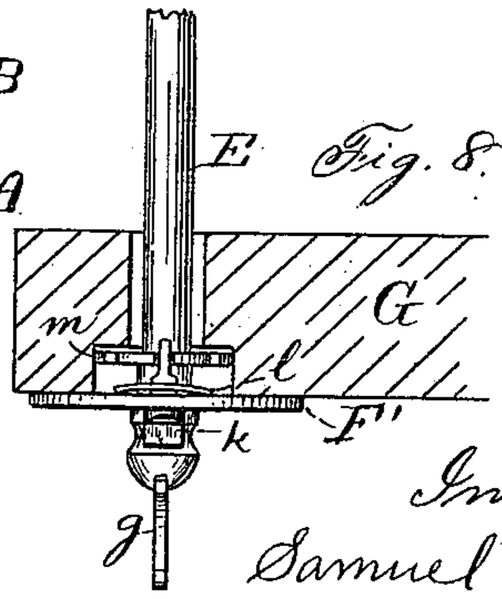


Fig. 7.

Fig. 8.



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UNITED STATES PATENT OFFICE.

SAMUEL N. CHAPIN, OF NEW BRITAIN, CONNECTICUT.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 332,325, dated December 15, 1885.

Application filed July 28, 1884. Serial No. 139,045. (Model.)

To all whom it may concern:

Be it known that I, SAMUEL N. CHAPIN, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a specification.

My invention relates to improvements in sash-fasteners of the class which are secured to the window-frame and have independently-operated bolts, which engage notches formed on or in the edge of the sash, for holding both the upper and lower sash.

In the accompanying drawings, Figure 1 is an elevation of my sash-fastener, looking upon the face-plate. Fig. 2 is a plan view of the same, together with a horizontal section of parts of the sashes and their surroundings. Fig. 3 is a side elevation of said fastener. Fig. 4 is a view showing the interior of the two parts of the case. Fig. 5 is a sectional view of said fastener on line *x x* of Fig. 4. Fig. 6 is a front view of the escutcheon for the spindle of said fastener with a stop-slide added thereto. Fig. 7 is a front view of the notched disk for use in connection with said stop-slide; and Fig. 8 is a plan view of the spindle, its escutcheon, and contiguous parts, together with a section of the casing to which they are secured.

I make the casing in two companion parts, A and B, of box-like form, and provide its front and rear ends with flanges *a*, having screw-holes, (see Fig. 1,) which flanges, together with the side from which they project, form the face-plate of my fastener. Each of these parts has a projection, *b*, which fits into a corresponding recess or mortise in the other part, for keeping the two parts in proper position, and also for forming one side of the mortise for the bolts C C. These bolts are fitted to slide freely within the casing, and are provided with a laterally-projecting lug, *c*, Figs. 4 and 5. The bolts are also recessed or notched a little upon one side to receive one end of the spring *d*, which bears upon the bolts with a constant tendency to force them outward. D is the hub, having arms *f*, and provided with a spindle-hole. Said hub is fitted to turn in suitable bearings within the case at a point between the bolts C C, so that one of its arms *f* may act upon the laterally-projecting lug *c* of one of the bolts, while the other arm *f* may engage the lug *c* of the other bolt.

E designates the spindle, having a thumb-piece, *g*, or other suitable handle, and made in cross-section of a size and shape to fit the hole in the hub D, as in ordinary knob-latches. The inner end of the spindle is supported axially within the hub, while its outer end is within the escutcheon F upon the casing G, which escutcheon may also furnish additional axial support to the spindle. I form a rib, *h*, upon one side of the spindle, and make a corresponding notch in the side of the hole through the escutcheon, (see Fig. 6,) in order that said rib may be passed through said escutcheon.

The device is secured to the window-frame H, with its two bolts, C C, upon the two sides of the parting-strip I, as shown in Fig. 2, so that one bolt may engage the upper sash, K, upon the front side of the groove for the cord, (in case the sash is a weighted one,) and the other bolt may engage the lower sash, L, at the rear of the groove, as shown. The sashes are provided with as many notches as may be desired. Whenever a notch in the edge of the sash is brought directly opposite the end of one of the spring-pressed bolts, its spring will project the bolt therein and firmly lock that sash in place. When both sashes are thus locked in place at any desired elevation, so as to leave the window either opened or closed, and it is desired to change—for instance, say, the upper sash—it is only necessary to turn the spindle to the right, when the arm *f* on the hub D will engage the lug *c* of the rear one of the bolts C and withdraw it from the sash, so that it may be raised or lowered, as desired, and some other notch in the sash brought in front of the bolt to lock the sash in the desired position, the other bolt meantime remaining entirely at rest.

The escutcheon F is secured to the casing G in Figs. 1 and 2, with the notch for the rib on the spindle at the top side of the hole in said escutcheon, instead of at the bottom, as in the escutcheon F′, Fig. 6, so that when the spindle is at rest and both bolts are projected, as shown in Fig. 2, the rib *h* will register with the notch in the escutcheon and permit the spindle to be withdrawn. In case the sash is left locked with the window partly open and the spindle

is removed, a person upon the outside of the house cannot reach in and unlock the fastener, as they could do in case the spindle were left in place. When the spindle is turned either to the right or left, the rib *h* comes behind a solid part of the escutcheon and prevents the spindle from being withdrawn until it is turned into a position to release both bolts.

Sometimes it may be desirable to hold one of the bolts back against its spring, or to lock the spindle in an intermediate position with both bolts projected. In Figs. 6, 7, and 8 I show mechanism for this purpose. The escutcheon F′ is like F, except that it is slotted and provided with a slide-stop, *k*, whose handle is upon the outside of the escutcheon, while its body is upon the inside. As in many other slides it is provided with a friction-spring, *l*, Fig. 8, to hold it in position. I recess the casing G sufficiently to admit the notched flange *m*, as shown in Fig. 8. This flange has its central opening like that in the hub D, to fit the spindle, so that when the spindle is inserted it turns with the spindle. When the slide *k* is moved upward to the full extent of its movement, it does not engage the flange. When the middle notch in the flange is under the slide-stop and the stop is moved downward to engage therewith, the spindle is firmly locked against movement in either direction, and with both bolts projected, it being understood that the escutcheon is secured firmly to the casing G. When the spindle is turned to one side to withdraw either bolt, one of the side notches in the flange comes under the stop-slide, so that moving the slide into said notch will hold the bolt in its withdrawn position.

I am aware that a prior patent shows a sash-fastener consisting, essentially, of a face-plate and a middle plate perpendicular thereto, two spring-pressed bolts, a hub with a projecting lug for each bolt, and a detached spindle for insertion through said hub to operate either bolt, as may be desired; also, that a prior patent for a sash-fastener shows a spring-pressed bolt operated by a ribbed spindle, two of which bolts may be used together for holding the upper and lower sashes of a window, said spindle being fitted in an escutcheon having shoulders near its orifice, so that the spindle may be drawn partially back through the escutcheon to lock either of the bolts out of engagement with their respective sashes. All of said prior art is hereby disclaimed.

My sash-fastener differs from the first one herein disclaimed by reason of its improved construction, whereby it is brought into a more practical form, can be made at a small cost, and all of the working parts are neatly housed by its metal casing.

My fastener differs from that last disclaimed herein by the employment of a stop-slide and notched flange behind the escutcheon, and in the fact that the spindle can be locked with said stop-slide to hold said spindle in that position where both bolts are locked into the sashes.

I claim as my invention—

1. The herein-described sash-fastener, consisting of the case made in two companion parts of box-like form, having bearings upon their inside walls for the spindle-hub, the spindle-lug D, having lugs *f f*, the bolts C C, having lugs *c*, and the springs *d*, the whole, except the outer ends of the bolts C C, being within the two-part case, all substantially as described, and for the purpose specified.

2. In a sash-fastener, the combination of the two bolts C C and the case, consisting of the two like companion parts A B, divided vertically, and having a bolt-mortise and projection, *b*, in and on the front plate of each part, all substantially as described, and for the purpose specified.

3. The combination of the spring-pressed bolts C C, the spindle E, suitable mechanism for operatively connecting said spindle and bolts, the escutcheon F, having stop-slide *k*, and the notched flange *m* upon the spindle, substantially as described, and for the purpose specified.

SAMUEL N. CHAPIN.

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