

UNITED STATES PATENT OFFICE.

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SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 556,368, dated March 17, 1896.

Application filed June 22, 1895. Serial No. 553,721. (No model.)

To all whom it may concern:

Be it known that I, ALBERT A. PAGE, a citizen of the United States, and a resident of the city and county of New Haven, in the State of Connecticut, have invented a new and useful Improvement in Sash-Fasteners, fully set forth and described in the accompanying specification, taken in connection with the drawings forming a part thereof, and in which like letters of reference represent like parts in all figures.

Figure 1 is a perspective view of the fastener attached and unlocked; Fig. 2, a perspective view of the part of the fastener attached to the inner sash; Figs. 3 and 4, longitudinal and transverse sections, respectively, of the part attached to the outer sash when in its locked position; Fig. 5, a perspective view of the operating-lever, looking at the under side thereof; Figs. 6 and 7, top and bottom views of the bolt, respectively; Fig. 8, a top view of plate to be attached to outer sash.

This invention relates to fasteners for locking windows, and is of the class known as "sash-fasteners," wherein a bolt or hooked lever is pivoted on one sash of the window to swing in a horizontal plane about its pivot and engage with a catch on the other sash. Such fasteners are now commonly constructed to draw the sashes securely together upon locking, by means of a compound movement of the hook or bolt, in which it is given a longitudinal movement transverse to the sashes after the circular movement is finished. This compound movement of the hook or bolt not only prevents the shaking of the sashes, but acts as a greater safeguard against the unlocking of the fastener from the outside, as it is more difficult to insert a tool between the sashes, and if such tool be inserted it cannot give the double movement to the hook.

This invention consists of a novel construction of a fastener, the catch of which is placed on the upper frame of the inner sash, and the hook, which is operated by a supplementary lever, is pivoted by means of a pin rigidly mounted on the lower frame of the outer sash, as more fully set forth hereinafter.

In the drawings, C represents the plate, having thereon the catch D with the flange d

on the upperside thereof, forming the groove d'. In the plate E are the circular openings e', and the groove e², forming an arc of ninety degrees, more or less, around the opening e', and extending directly rearward in the prolongation e³. The pin or pivot F fits in the opening e', and secures to the plate E the hook or bolt G and operating-lever H, each having in its under side a lug or trunnion g and h, respectively. The lug g is placed in and adapted to slide in the groove e² and prolongation e³, and the lug h fits into the groove g' in the upper side of the bolt G. The slot g² in the hook G is adapted to receive the pin F, and extends longitudinally to allow the hook a lengthwise play about the pin F. The pin F also passes through the circular hole h' in the lever H, and has a coiled spring L about it adapted to fit in a countersink h² in the upper side of the lever. By this arrangement of parts the lever H and hook G when in their normal or unlocked position are adapted to extend lengthwise on the plate E, the free end of lever H being parallel to and above the hook G, Fig. 1, instead of extending in an opposite direction, as hitherto. In this position the lug h is in the groove g', and the lug g in the end of groove e² toward the catch D.

Upon turning the lever H by means of the knob h³ toward and over the plate C to lock a window, the lug h will force the hook G about its pivot, keeping the lever and hook in the same relative position (one over the other) until the hook G engages with the catch D, which will take place when the lever and hook have described an arc of ninety degrees about their pivot. The further rotation of the lever H by means of the lug h will force the hook rearward, the lug g passing into the prolongation e³ of the groove e² and the pin F sliding in the slot g². When the lever is again in a position lengthwise with the plate E, (see Fig. 3,) the hook has been drawn rearward to engage with its hooked end g³ in the groove d' of the catch, and the sashes of the window drawn together and the window securely locked.

The plate C with the catch D is adapted to be placed on the upper frame of the inner

sash and the plate E, with the hook and lever on the lower frame of the outer sash, thus reversing the method hitherto employed in arranging the parts of a fastener of this general class. A fastener can only be so applied wherein the lever is adapted to swing over the hook in the operation of locking, as the lever must swing away from the window and the hook in the same direction to engage with the catch on the inner sash.

The construction of this fastener and its method of application to windows overcomes the chief objection to this class of fasteners, as the hook cannot be operated to lock the window until the two sashes of the windows are closed, for the operating-lever cannot be reached and the hook cannot pass over the plate C until the upper frame of the lower or inner sash is on a level with the lower frame of the upper or outer sash. As soon as the two frames are in alignment, the passing over the plate C of the hook practically locks the window, as the window cannot be raised until the hook is thrown back.

The fastener herein described cannot mar the frames of the window, as it must be entirely unlocked and in its normal position—

i. e., extending longitudinally with the plate E—before the window can be raised.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

A sash-fastener consisting of a plate secured to the outer sash of a window; a pivot-pin rigidly secured to said plate and having a flanged head a hook having a longitudinal slot through which passes said pivot-pin; said hook on its upper side being grooved from said slot, and being provided with a lug on the under side adapted to slide in a groove in said plate, partially surrounding said pivot-pin and extending radially therefrom; a lever pivoted by said pin to said plate, with a downwardly-projecting lug engaging in said groove on said hook a spring bearing on said lever and flanged head of said pivot-pin; and a catch on the inner sash of the window, substantially as described.

In witness whereof I have hereunto set my hand this 3d day of June, 1895.

ALBERT A. PAGE.

Witnesses:

ELLIOTT LITTLEJOHN,
CHARLES L. BALDWIN.