No. 809,609. PATENTED JAN. 9, 1906.

H. W. J. EDBROOKE & F. LINDQUIST.

WINDOW SASH.

APPLICATION FILED MAR. 2, 1905.

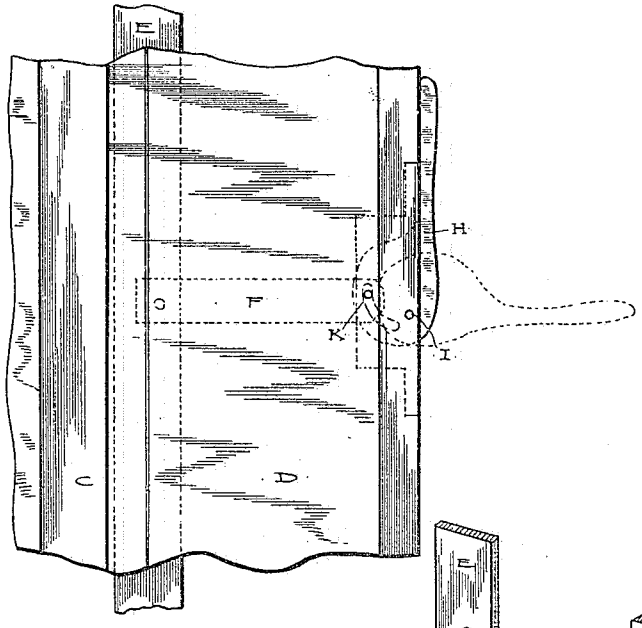

FIG. 1.

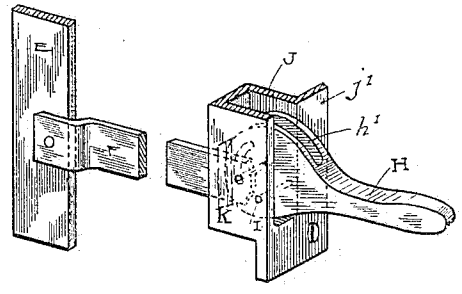

FIG. 4.

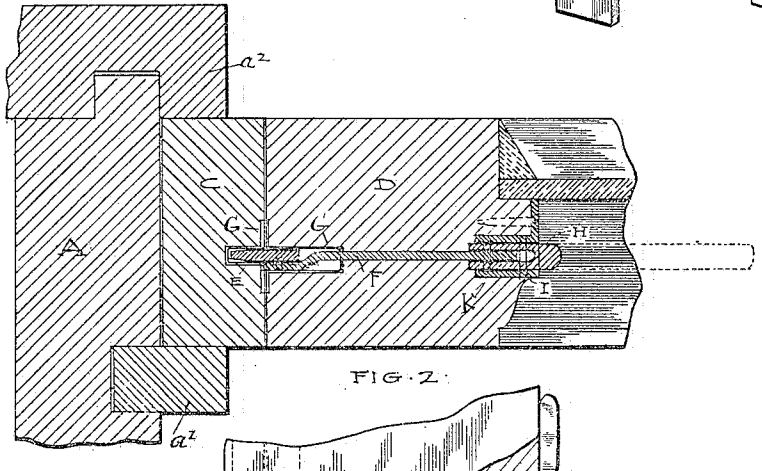

FIG. 2.

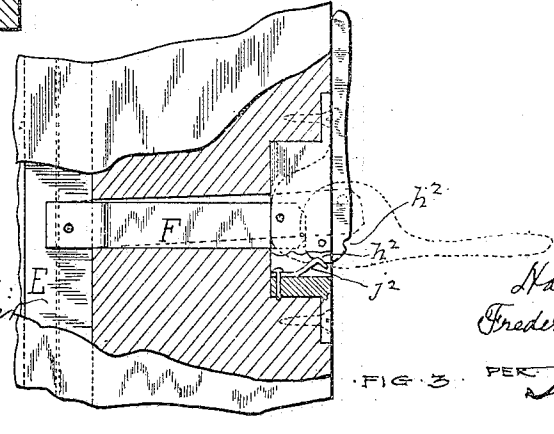

FIG. 3.

WITNESSES

Arthur Friedman

John C. Clark

INVENTORS

Harry W. J. Edbrooke

Frederick Lindquist

PER Fred'k Benjamin

ATTORNEY.

UNITED STATES PATENT OFFICE.

HARRY W. J. EDBROOKE AND FREDERICK LINDQUIST, OF CHICAGO, ILLINOIS.

WINDOW-SASH.

No. 809,609. Specification of Letters Patent. Patented Jan. 9, 1906.

Application filed March 2, 1905. Serial No. 248,010.

To all whom it may concern:

Be it known that we, HARRY W. J. EDBROOKE and FREDERICK LINDQUIST, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Window-Sash, of which the following is a specification.

This invention relates to improvements in means for effecting a weather-tight and locking closure between window-sash, transoms, and the like and the frames in which they are set or hung; and the particular object of such improvements is to provide a construction and arrangement which can be applied alike to either pivotally-swinging sash and sliding sash and to either metal or wood windows.

In the accompanying drawings, which form a part of this application, Figure 1 is a view in elevation of interfitting portions of a sash-stile and window-frame equipped with our invention in its approved form. Fig. 2 is a cross-section taken through a sash stile and frame and the elements which go to make up our invention. Fig. 3 is a view, partly in elevation and partly in section, of a modified form of our invention; and Fig. 4 is a detail in perspective of portions of the operative elements of our invention.

Referring to the drawings in detail, A a' a^2 represent the parts of an ordinary wood window-frame, to which a sash is slidably fitted.

C and D represent the two parts of a divided or separable sash-stile, and it will be understood that both parts may slide together on the frame, or the part D may be pivotally swung on the part C, such construction and relative arrangement being well known in the art and therefore not shown herein. In the adjacent faces of the parts C and D vertical grooves are cut throughout the length of said pieces, and into these grooves are fitted metal channel-rails G G, constructed of copper, zinc, or other suitable non-corrosive metal. These rails together form a seat, socket, or housing for a flat bar E, which may be of any suitable metal and is thin enough to permit it to move freely between the adjacent walls of the channel-rails G G. One edge of the bar E is slightly tapered, as shown in Fig. 2, thereby insuring its entrance into the rail G on the stile part C.

As shown in Figs. 1, 2, and 4, to the bar E is riveted a strap F, the riveted end of which is slightly offset from the main portion of the bar. A pin K extends through the free end of the bar and projects on opposite sides thereof. This end of the bar extends through a suitable opening in the rear side of a cast-metal box J, which is let into the sash and is secured in place by screws which pass through the flange j' of said box.

Eccentrically mounted in the box J on a pivot-pin I is a cam-lever H, formed with curved slots to receive the projecting ends of the pin K and with a vertical recess h' to receive the end of the bar F. It will be apparent that upon the lever being changed from a vertical to a horizontal position, as indicated in dotted lines, the bar F will be drawn entirely into the groove in the channel-rail G of the sash part D, thus releasing the part C and permitting the swinging of the part D if it be pivotally or hingedly mounted or hung. As shown in Fig. 3, instead of forming the lever H with slots we may pivotally connect the bar F with the bar E and with the lever, in which case the stile must be cut away to allow for the vertical play of the bar F. To insure the retention of the lever in its respective adjused positions, we form in its rounded edges notches h^2 h^2, which are engaged by the free end of a spring j^2, secured to the lower part of the box J and normally pressing against said lever, as clearly indicated in Fig. 3.

In practice two levers will be used for operating the security-bar in each stile where the sash is large; but for short sash one lever at or near the center of each stile will be sufficient for practical purposes. It is also our intention to use non-corrosive metal in the construction of the channel-bars G and the security-bar E, thus insuring the easy movement of the latter.

Various changes may be made in the connection between the lever and the bar E and in the manner of locking the lever by spring in its adjusted positions, all within the scope of our invention.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In combination with a frame and a sash mounted therein, said sash having two-part stiles as described, and the parts of the stiles having registering vertical grooves formed in their adjacent faces, a metal locking-bar arranged in said grooves, and means for oper-

ating said bar said means comprising an eccentrically-pivoted and recessed lever connected with said bar and a spring adapted to lock said lever in its adjusted positions.

2. In combination with a frame and a sash mounted therein, said sash having two-part stiles as described, and the parts of the stiles having registering vertical grooves formed in their adjacent faces and metal channel-bars arranged in said grooves, a metal locking-bar arranged in said channel-bars, and means for operating said locking-bar, said means comprising a hollow box secured to the inner face of the sash-stile, a recessed lever eccentrically pivoted in said box and a strap connecting said lever and said locking-bar one end of said strap fitting the recess in said lever.

3. In combination with a frame and a sash mounted therein, said sash having two-part stiles as described and the parts of each stile having registering vertical grooves formed therein, channel-bars fixed in said grooves, a metal locking-bar arranged in said channel-bars, and means for operating said locking-bar, said means comprising a box secured to the stile, a slotted recessed and notched lever eccentrically pivoted in said box, a strap connected with said locking-bar and having a pin fitting the slots in the lever, one end of said bar adapted to move in the recessed portion of the lever, and a spring adapted to engage the notches in said lever and hold it in its adjusted positions.

In testimony whereof we affix our signatures in presence of two witnesses.

HARRY W. J. EDBROOKE.
FREDERICK LINDQUIST.

Witnesses:
F. BENJAMIN,
H. DELOS HIGMAN.