(No Model.)

# D. O. LIVERMORE.

## SASH FASTENER.

No. 419,692. Patented Jan. 21, 1890.

Fig. 1.

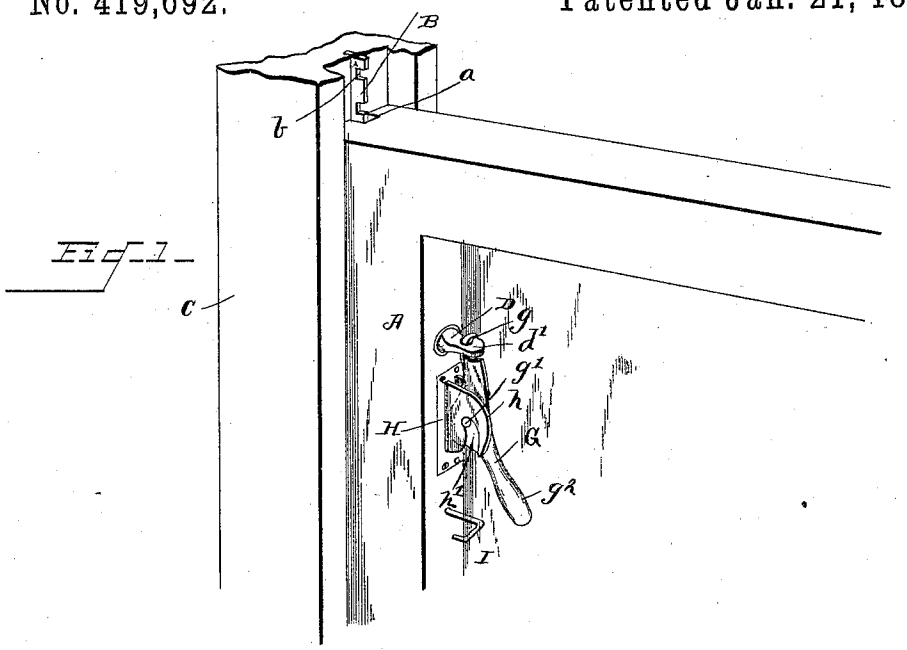
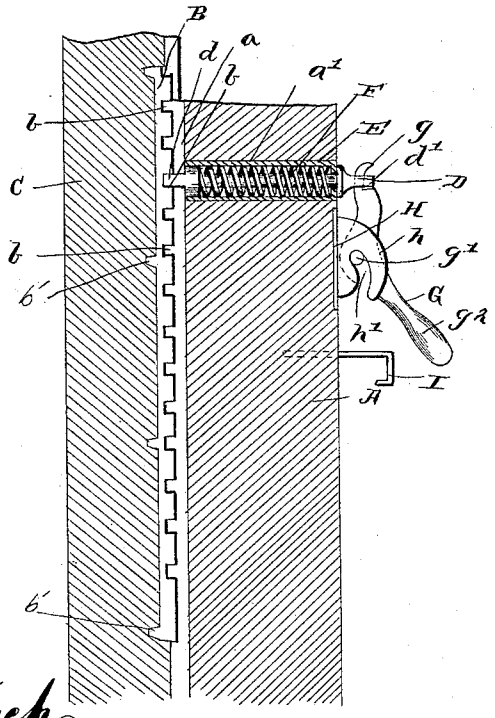



Fig. 2.




Witnesses

Geo. E. Freeh.

H. F. Riley

Inventor

D. O. Livermore.

By his Attorneys,

C. A. Snow & Co.

N. PETERS, Photo-Lithographer, Washington, D. C.

# UNITED STATES PATENT OFFICE.

DARWIN O. LIVERMORE, OF LOS GATOS, CALIFORNIA, ASSIGNOR OF ONE-FOURTH TO FRANK Y. WHITMORE, OF WEST UNION, IOWA.

## SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 419,692, dated January 21, 1890.

Application filed September 26, 1889. Serial No. 325,111. (No model.)

*To all whom it may concern:*

Be it known that I, DARWIN O. LIVERMORE, a citizen of the United States, residing at Los Gatos, in the county of Santa Clara and State of California, have invented a new and useful Sash-Lock, of which the following is a specification.

The invention relates to improvements in sash-locks.

The object of this present invention is to provide a sash-lock of simple and economic construction, which is adapted to be applied to an ordinary window, and which will hold a window at any point and will occupy but little space and not interfere with inside blinds or screens.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a sash-lock constructed in accordance with the invention and applied to a window. Fig. 2 is a longitudinal sectional view of the same.

Referring to the accompanying drawings, A designates the side rail of a window-sash, provided with a longitudinal groove *a* in its outer edge, in which groove projects a notched plate B, that is secured to the side of the window-frame C, and is designed to be engaged by a sliding bolt D to hold the window-sash at any point. The sliding bolt D is arranged in a tubular casing E, fitted in a recesss *a'* communicating with the groove *a* of the window-sash A, and it has a reduced rectangular end *d*, which engages the square notches *b* of the plate B, and the bolt is normally held in engagement with the plate B by a spiral spring F, that has its bearing against the end *d* of the bolt that engages the plate B and the opposite end of the tubular casing. The end *d'* of the bolt is perforated and is engaged by a hooked end *g* of a lever G, which is journaled in ears *h* of a plate H and is designed to withdraw the bolt from the notched plate to allow the window-sash to slide.

The plate H is set into a recess, and the ears *h* are arranged parallel and are provided with curved slots *h'*, which form open bearings for the journals *g'* of the lever G, and enable the latter to be readily removed or inserted in place, the curved slots forming a cam-surface, which prevents displacement of the lever when in use. By this construction it will readily be seen that the sash-lock may be placed upon a window without riveting the parts together.

In order to hold the bolt from engagement with the notched plate, a swiveled hook I is provided to engage the arm $g^2$ of the lever.

Instead of placing the spring F within the tubular casing, it may be secured to the plate H to engage the arm $g^2$ of the lever G, and the same result will be produced; and I desire it to be understood that I do not limit myself to the precise detail of construction herein shown and described, as I may, without departing from the spirit of the invention, make various minor changes therein. The notched plate B has a thin rear edge, which is provided with points or projections *b'*, whereby the plate is adapted to be driven into the side of the window-frame into proper position.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will readily be understood.

What I claim is—

1. The combination, with the spring-actuated bolt, the lever engaging the bolt, and provided with journals, of the plate having ears provided with curved slots, forming open bearings for the journals, and providing a cam-surface to prevent displacement of the lever, substantially as described.

2. The combination of the spring-actuated bolt having a perforation, the lever provided with a hooked end to engage said perforation and having journals, and the plate provided with ears having curved slots forming open bearings for the said journals, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

DARWIN O. LIVERMORE.

Witnesses:
J. W. LYNDON,
A. BERRYMAN.