

J. KEITH.
Sash-Fasteners.

No. 146,765.

Patented Jan. 27, 1874.

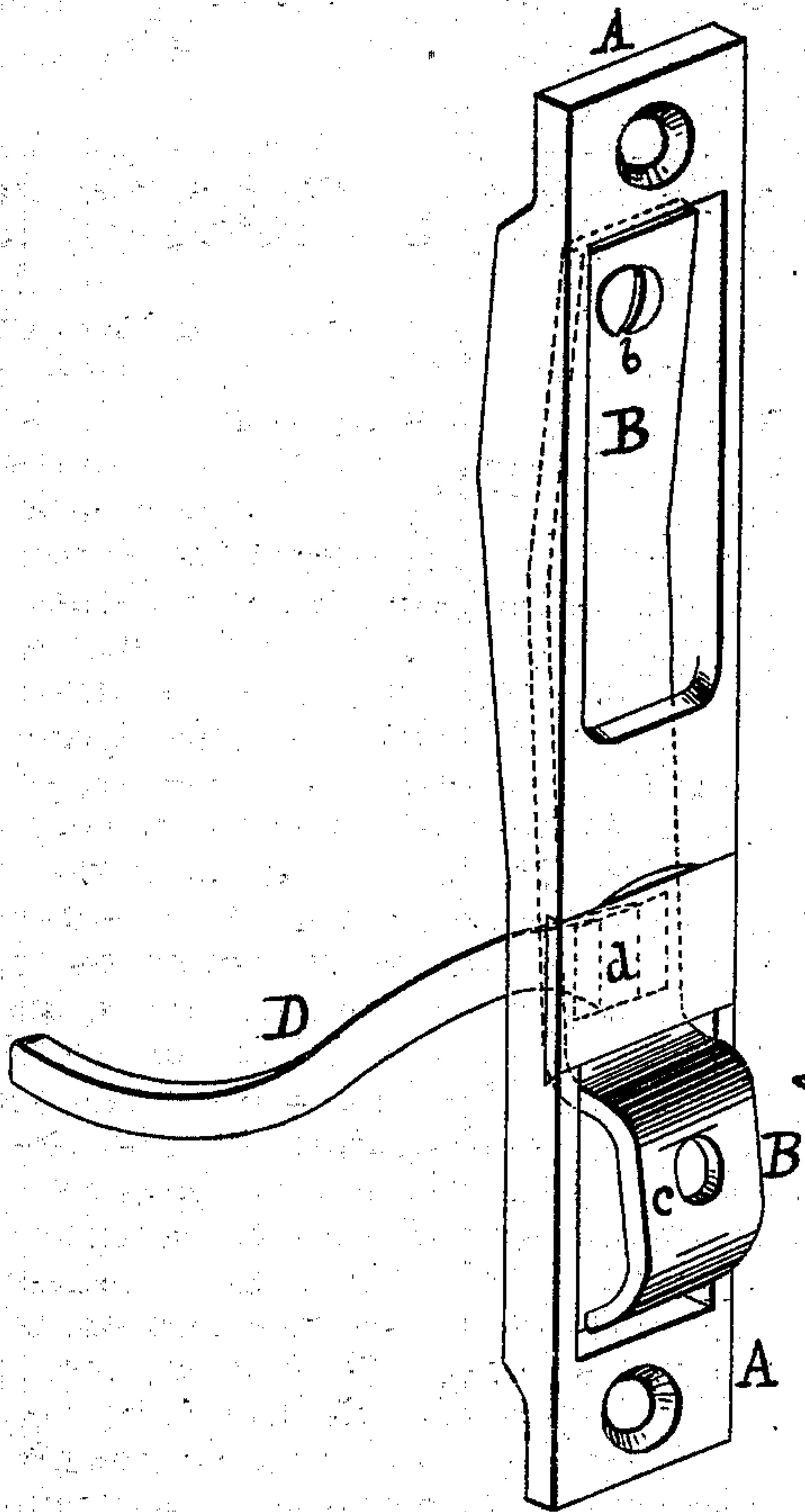


FIG. 1.

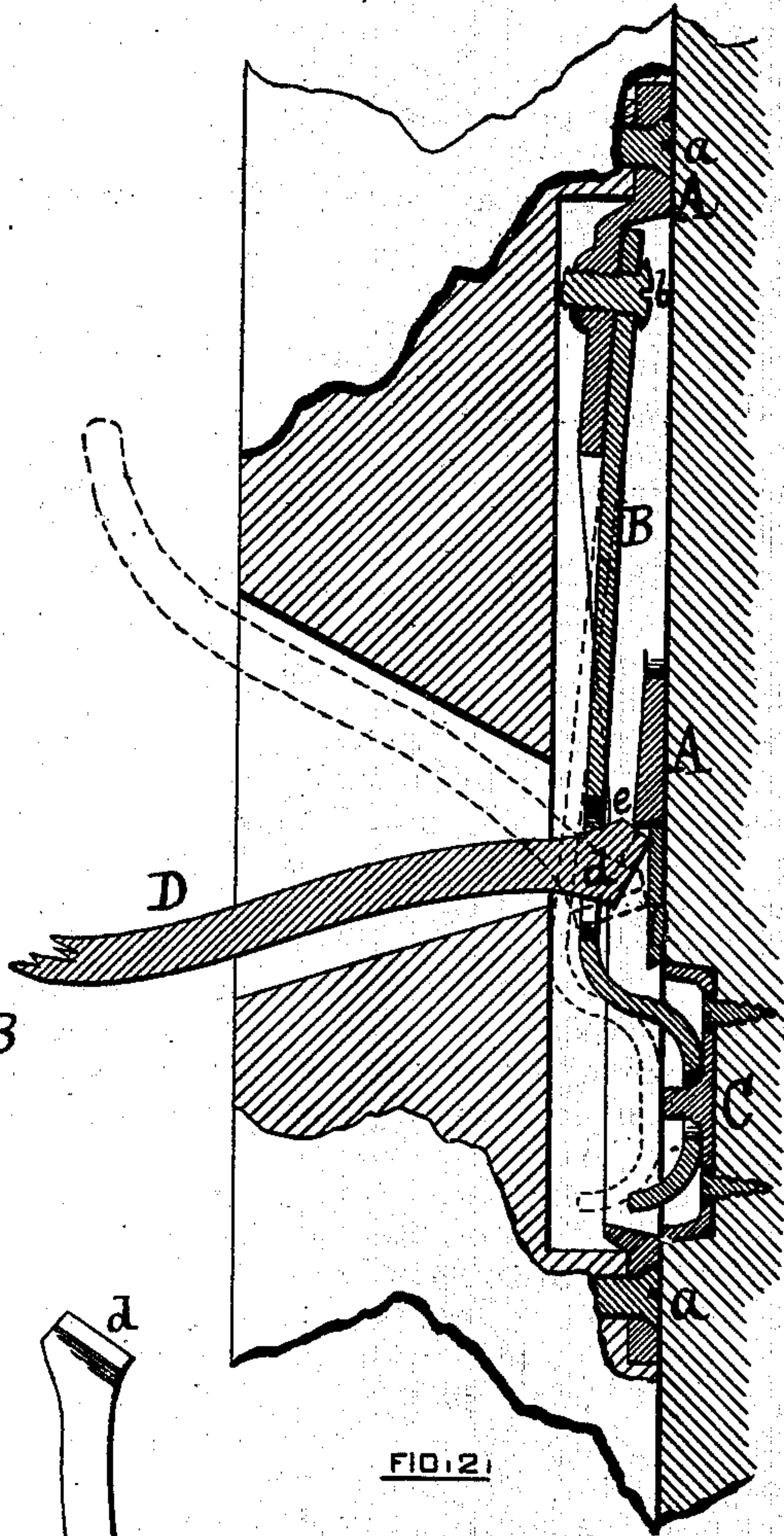


FIG. 2.

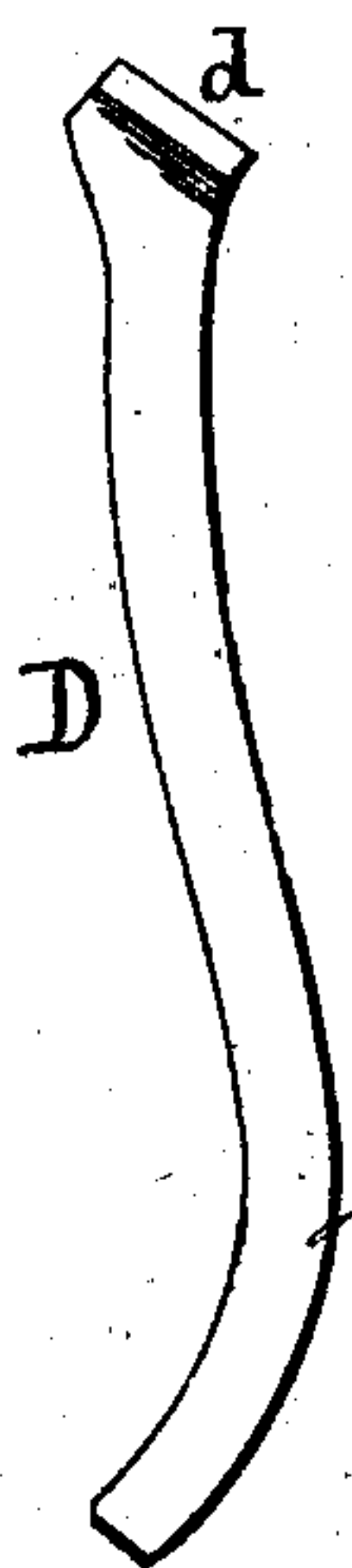


FIG. 3.

WITNESSES.

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JEREMIAH KEITH, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN SASH-FASTENERS.

Specification forming part of Letters Patent No. 146,765, dated January 27, 1874; application filed December 22, 1873.

To all whom it may concern:

Be it known that I, JEREMIAH KEITH, of the city and county of Providence, in the State of Rhode Island, have invented a new and Improved Sash-Supporter, of which the following is a specification:

In the accompanying drawing like letters indicate like parts.

Figure 1 is a perspective view of my invention. Fig. 2 is a longitudinal section. Fig. 3 shows the finger-piece or lever detached.

My invention is designed to support and hold a window-sash in any desired position by means of a bent spring of peculiar form pressing against the inner surface of the window-frame, and operated by a cam-headed lever or finger-piece interposed between the spring and case, for setting or releasing the spring at will.

A metallic case, A, is inserted in a mortise in the stile of the window-sash and fastened by the screws *a a*. Within this case is a long spring, B, bent, as shown in Fig. 2, its upper end fastened to the case by the screw *b*, by which also the stiffness of the spring may be regulated, and its lower or free end fastened into a bow-shaped curve, which is the part pressing against the inner surface of the window-frame, and thereby sustaining the weight of the sash. At the central point of this curve is an opening, *c*, made to receive the corresponding knob of the locking-plate C, which is sunk into a mortise of the window-frame. By this device the sash is locked down. Through a slot in the stile of the sash a long curved finger-piece or lever, D, works, which passes through an elongated opening in the spring D. The lever D has a rectangular or other cam-shaped head, *d*, which projects on both sides. This head *d*, as the lever is raised, braces against a shoulder, *e*, made in the case A, and, as it cannot move farther in that direction, it takes a rotary motion, the upper edge of the head sliding along and bearing against the case A, while the lower edge forces back the spring B until the head *d* has been brought to nearly a horizontal position, when the spring is set and is firmly held back in place. By thus elevating the finger-piece D, the lower or projecting curved portion of the spring is withdrawn within the case A, whereby it is disengaged from the locking-piece C and its knob. The window-sash can then be raised to any desired height; then the finger-piece is lowered, and the spring

B, resuming its former position, presses with great force with its projecting curved part against the window-frame, and the sash is held immovably in place.

I am aware that Letters Patent of the United States, numbered 46,472, and dated February 22, 1865, were granted heretofore to Henry F. Jenks, of Pawtucket, Rhode Island, for an improved sash-supporter; but, though his invention has a general similarity in form to mine, yet it is wholly unlike it in its operation and results. With his invention the spring must be kept back by a constant power exerted upon the lever at the same time and so long as the sash is moving; sometimes the power must be applied to the lever in a direction directly opposite to that required for the moving of the sash. As the spring is held back by main force, it is not entirely free from pressure against the window-frame, and gradually, by friction, wears into the window-frame, at last rendering the invention less efficient; but with my invention the spring is set immovably in position by means of my cam-headed lever, and, being wholly withdrawn from the window-frame, does not wear into it or bear against it while the sash is moving, and moreover no power whatever is applied or needed upon the lever at any time when the sash is in motion. Again, the lever, as shown in his specification, is pivoted within the case, the fulcrum remaining always the same, while the force required to draw back the spring is continually increasing during the operation; but in mine, the lever being free, and sliding in the peculiar manner shown, requires a constantly-decreasing power during the operation, the leverage increasing rapidly as the finger-piece is raised.

I claim as a novel and useful invention, and desire to secure by Letters Patent—

The combined sash supporter and fastener, consisting of the slotted case A, the bent spring B having the bow-shaped curve and opening *c*, the cam-headed lever D interposed between the spring and case, its free end projecting as a thumb-piece, and the locking-plate C, all constructed, arranged, and operating substantially as described and shown, for the purpose set forth.

JEREMIAH KEITH.

Witnesses:

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