

(No Model.)

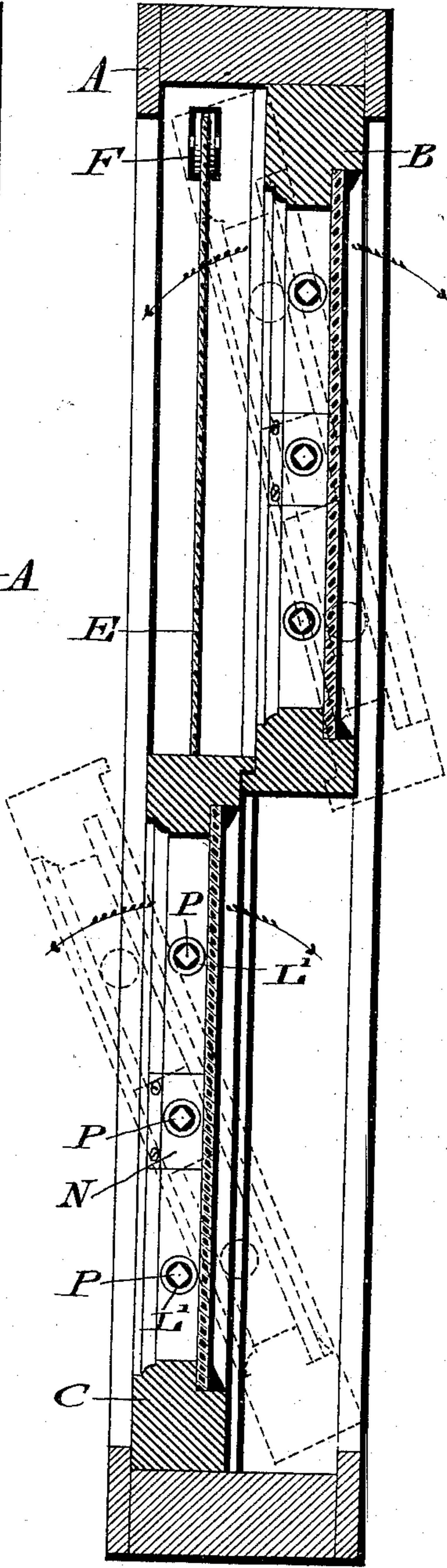
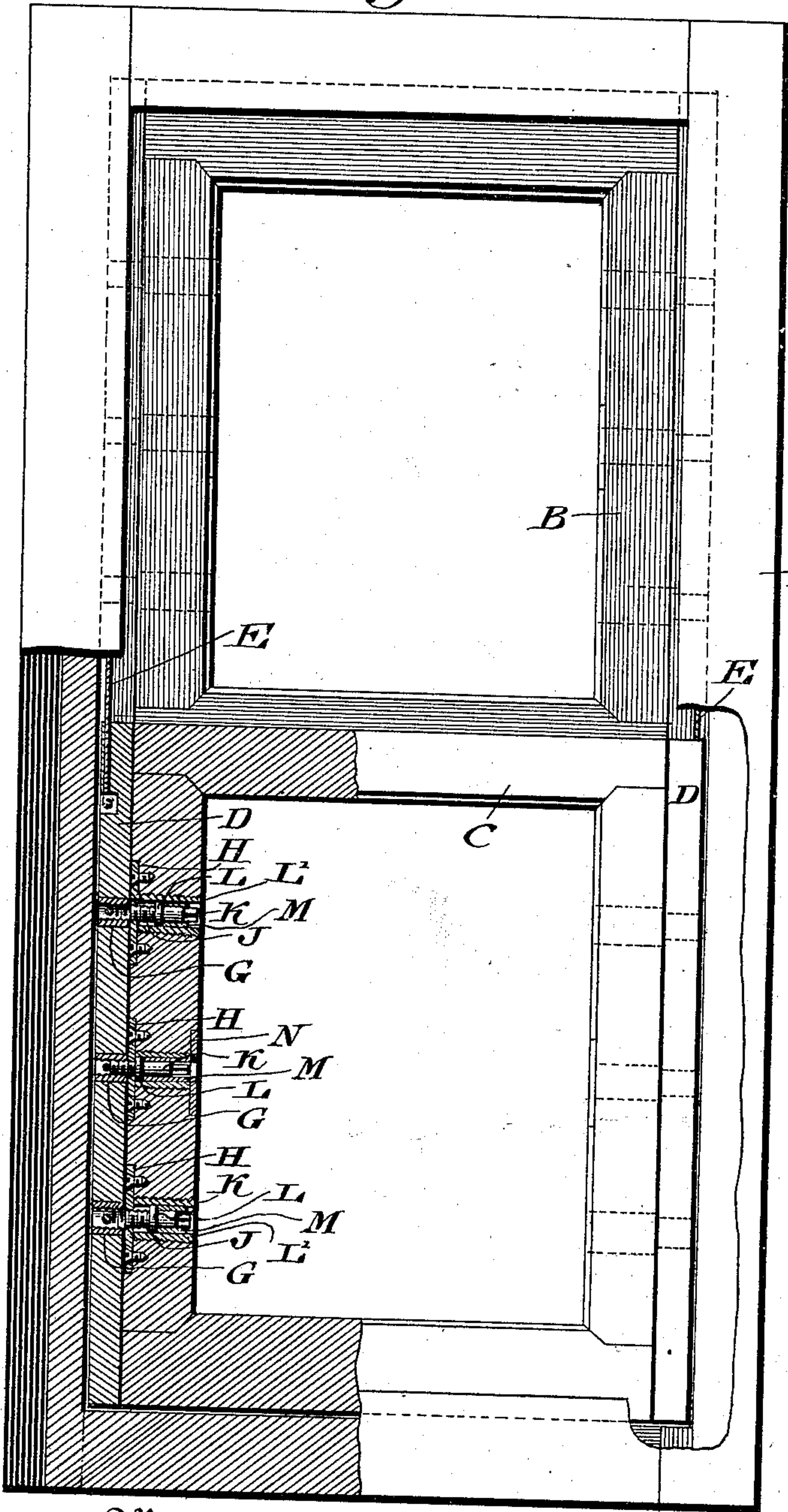
C. S. MOSSOP.  
REVERSIBLE WINDOW SASH.

No. 542,488.

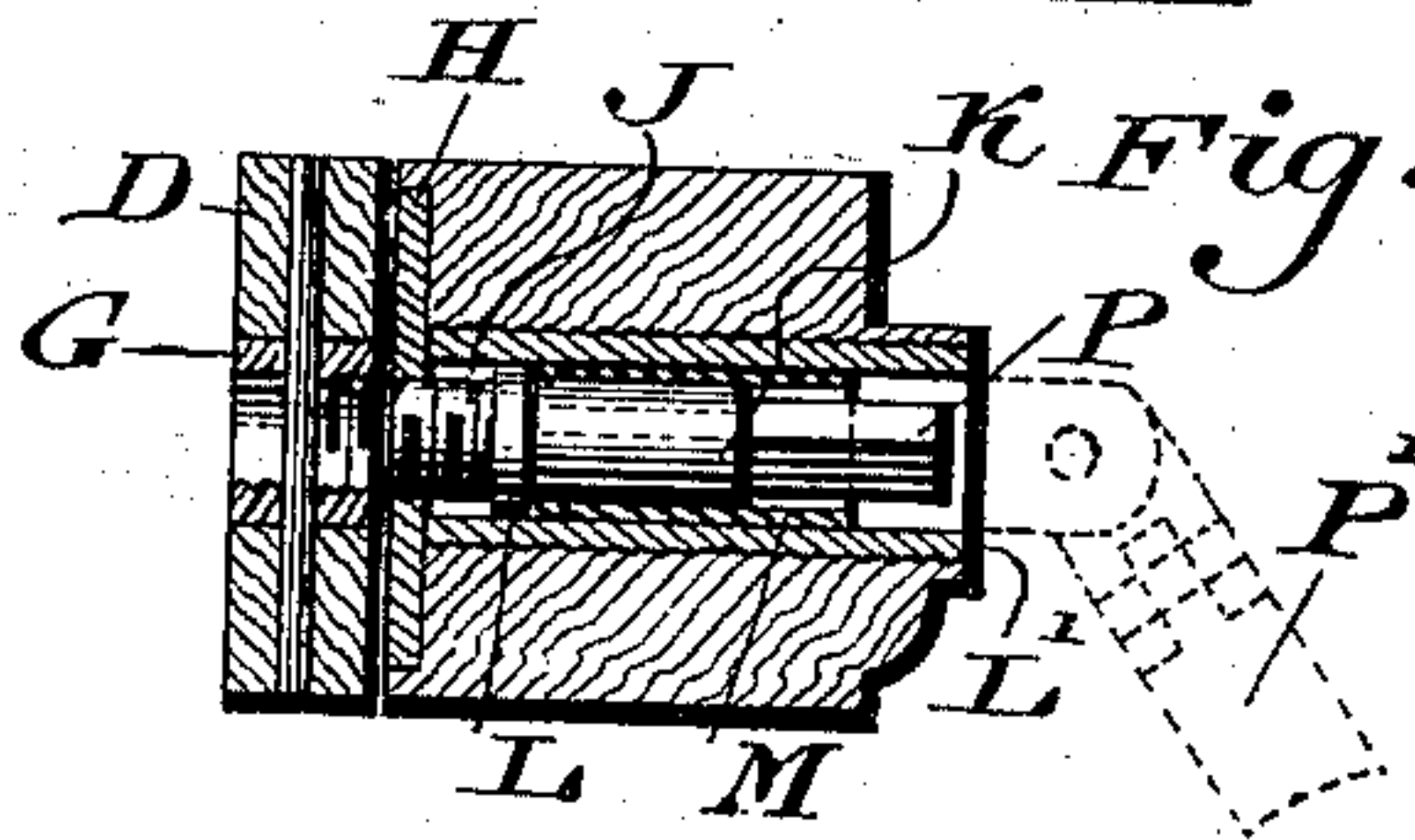
Patented July 9, 1895.

*Fig. 1.*

*Fig. 2.*



Witnesses  
*P. F. Hagles.*  
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*Fig. 3.*

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# UNITED STATES PATENT OFFICE.

CLEMENT SHARP MOSSOP, OF PHILADELPHIA, PENNSYLVANIA.

## REVERSIBLE WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 542,488, dated July 9, 1895.

Application filed March 19, 1895. Serial No. 542,318. (No model.)

*To all whom it may concern:*

Be it known that I, CLEMENT SHARP MOSSOP, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Reversible Window-Sashes, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a novel construction of a reversible window-sash, by means of which said sash can be readily tilted or reversed as may be desired or required, provision being made for allowing the same to be swung on a suitable axis and to be locked when in either of its extreme positions.

It further consists of novel details of construction, all as will be hereinafter set forth.

Figure 1 represents a front elevation, partly in section, of a reversible window-sash embodying my invention. Fig. 2 represents a vertical sectional view of the same. Fig. 3 represents a detail view on an enlarged scale to be hereinafter referred to.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a window-casing, and B and C designate the upper and lower sash, respectively, thereof, and, since both are substantially the same, a description of one will suffice for both. The said sash C has on each side thereof, adjacent to it, the upright strips D, to each of which a cord E is attached, said cord passing over a suitable pulley F, journaled in the upper portion of the window-casing. Each of the said strips D have inserted therein the thimbles G, which in the present instance are threaded internally and have their ends flush with the edges of said strips D, said thimbles being held immovably in place by any suitable means.

H designates plates which are suitably set into the faces of the window-sashes adjacent said strips D, and have, in the present instance, an opening therein, through which passes the threaded portion J of the stud K, the latter having a shoulder L thereon which acts as a stop and is of substantially the same diameter as the thimble L', which is adjacent to said plate H, said shoulder L being adapted to abut against a suitable bushing M, which

is held within said thimble L', whereby the movement of said stud K may be limited as may be desired, the threaded portion of said stud normally engaging the adjacent threaded thimble G.

Each of the studs K has its extremity P squared, so that a wrench P', provided with suitable joints, as shown dotted in Fig. 3, may be applied thereto for turning the same. It will be noticed, however, that the internal bushing M of the central stud is held against the shoulder of the latter by the plate N, so that the threaded portion J of said centrally-located stud will always be in engagement with its thimble G, said central stud on each side of the sash thus acting as an axis on which the sash may be turned or reversed.

The operation is as follows: When it is desired to reverse the window-sash, the two outer stems on each side are screwed into the position seen in Fig. 1, out of engagement with the bushings G, the central stem remaining in the position seen, whereupon the window-sash can be readily turned or reversed, as seen dotted in Fig. 2. When it is desired to raise the window, the same is turned into the position seen in Fig. 1, and the outer studs are caused to engage their adjacent bushings, whereupon it will be seen that the sash C and the strips D on either side can be raised or lowered in unison, as is evident.

It will be apparent that, although I have shown three studs and thimbles, &c., in each side of each sash, the number of the same may be varied, if desired—e. g., in large windows five studs with their adjuncts may be employed, the central stud serving as an axis, while the two outer ones will serve to lock the window-sash in position relative to the adjacent strips, which will have the cords E or their equivalents attached thereto, as in the present instance. It will also be apparent that other changes may be made by those skilled in the art, which will come within the scope of my invention, and I do not, therefore, desire to be limited to the exact constructions I have herein shown and described.

When it is desired to take the sash out, the plates N are removed and the bushing M is withdrawn sufficiently to allow the inner end of the stud K to be moved out of engagement with the adjacent thimble G, the outer studs



K on each side being now in the position seen, and the sash can be readily removed, as is evident.

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

1. A window sash, strips on the sides thereof, having thimbles secured therein, plates secured to the sides of said sash, having openings therein adapted to register with said thimbles, studs movable in said sash and thimbles, and having shoulders adapted to abut against said plates, and suitable stops for holding said studs in position, said parts being combined substantially as described.

2. A window sash, a movable strip adjacent thereto, threaded thimbles secured therein, plates attached to said sash, and having thimbles extending therefrom, threaded studs provided with a shoulder mounted in said last mentioned thimbles, and bushings secured within the latter, and acting as a stop, substantially as described.

3. In a device of the character described, a

window sash and a strip D adjacent thereto, the threaded thimble G secured in said strip, the apertured plate H and thimble L' attached thereto, the stud K mounted in said thimble L', and having the shoulder L and squared portion P thereon, and the internal bushing M serving as a stop, said parts being combined substantially as described.

4. In a device of the character described, a window sash, and a strip D adjacent thereto, the threaded thimble G secured in said strip, the apertured plate H and thimble L' attached thereto, the stud K mounted in said thimble L', and having the shoulder L, and squared portion P thereon, the internal bushing M serving to hold said shoulder in contact with said plate H, and the plate N for holding said bushing in position, said parts being combined substantially as described.

CLEMENT SHARP MOSSOP.

Witnesses:

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