

No. 637,755.

Patented Nov. 21, 1899.

J. H. METZ.

SASH LOCK.

(Application filed Jan. 28, 1899.)

(No Model.)

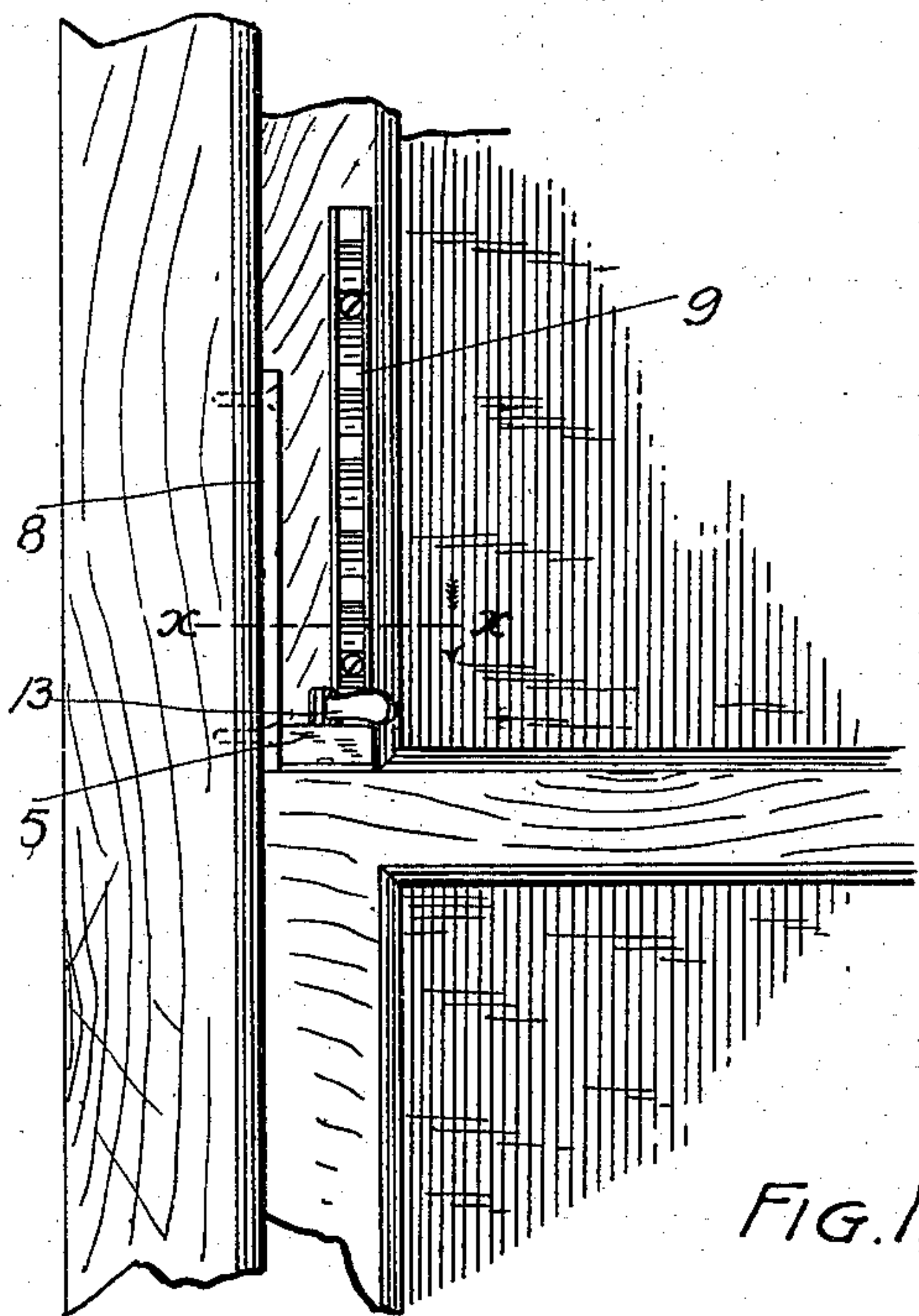


FIG. 1.

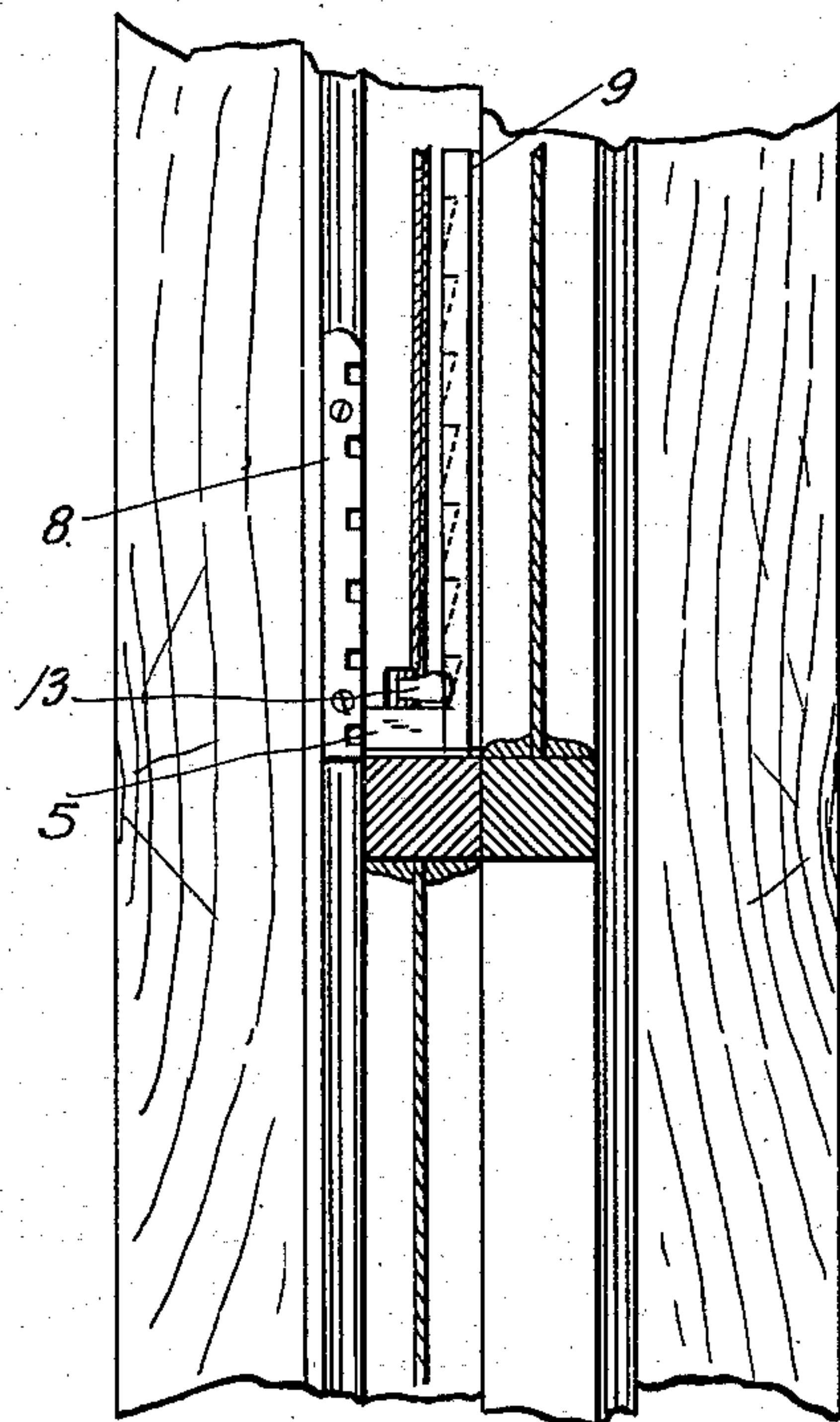


FIG. 2.

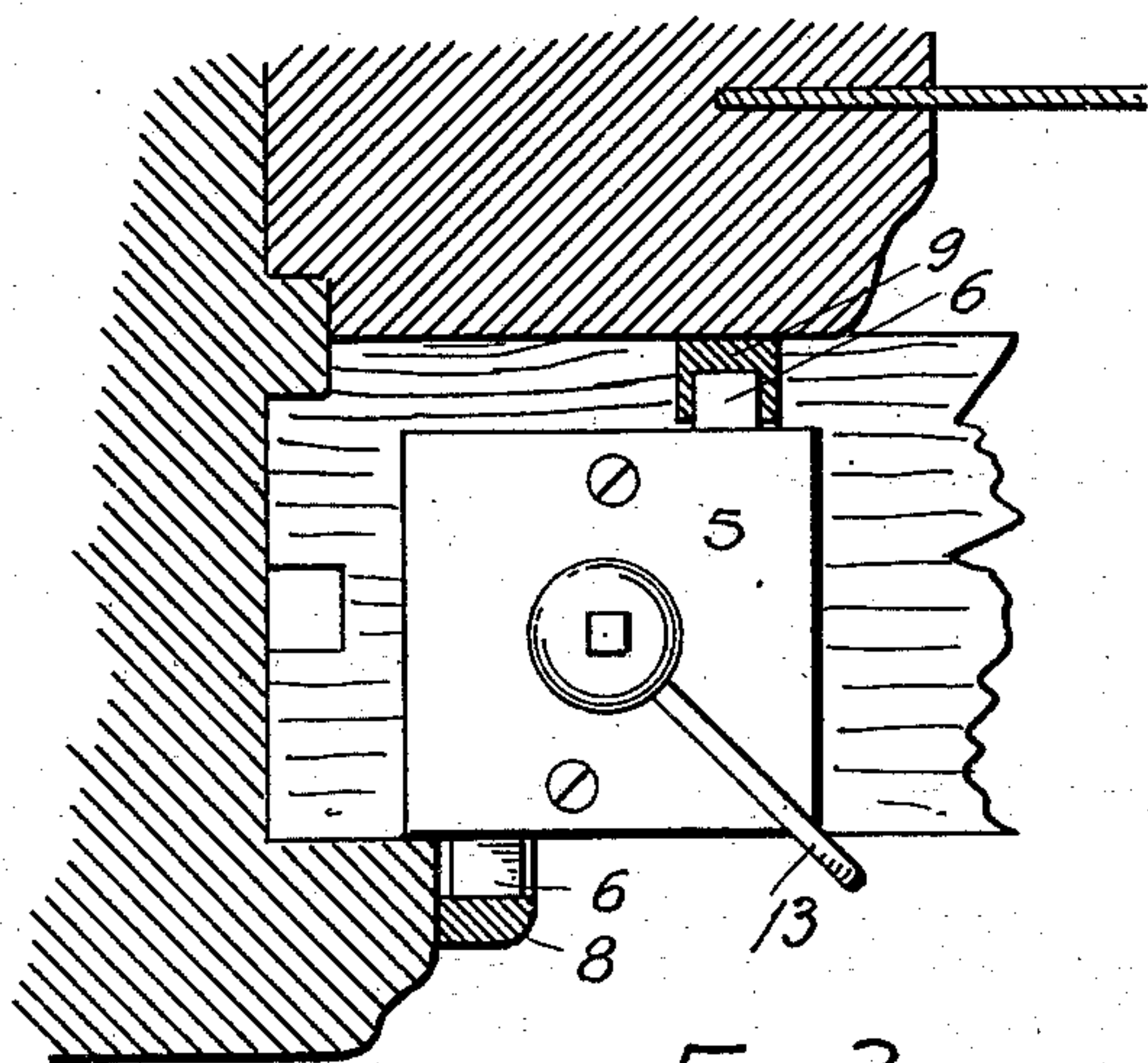


FIG. 3.

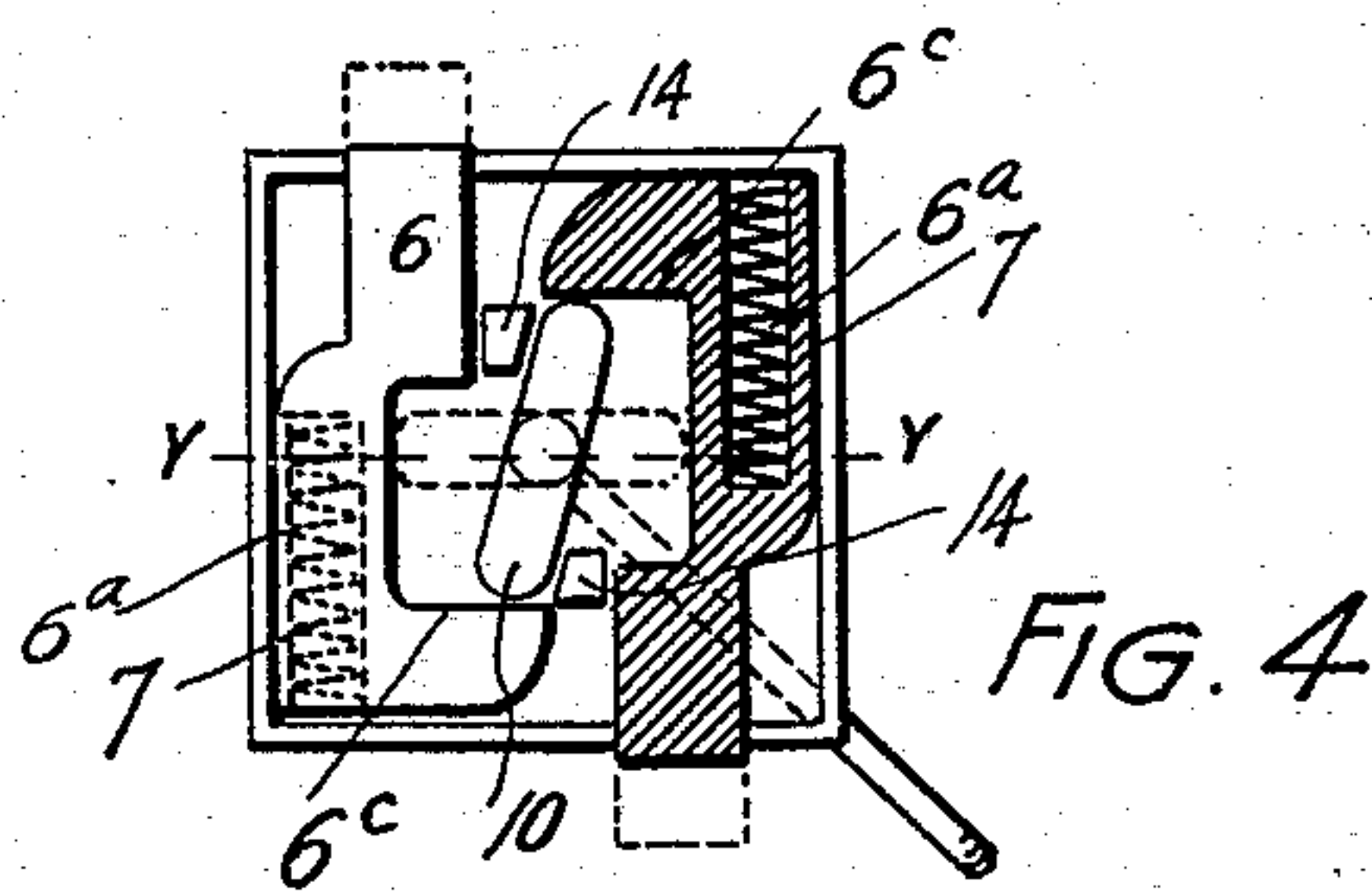


FIG. 4.

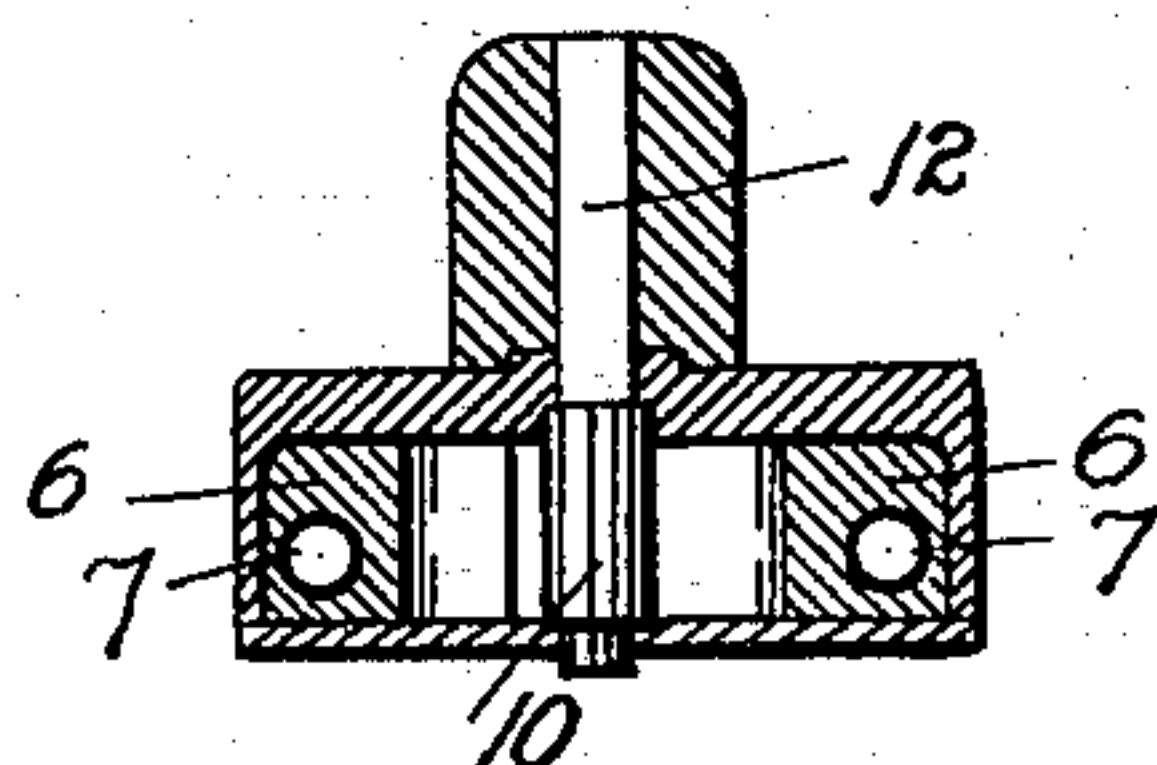


FIG. 5.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN H. METZ, OF DENVER, COLORADO.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 637,755, dated November 21, 1899.

Application filed January 28, 1899. Serial No. 703,676. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. METZ, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Sash-Locks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in window-sash locks, my object being to provide a device of this class which shall be simple in construction, economical in cost, and reliable, durable, and efficient in use; and to these ends the invention consists of the features herein-after described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a front elevation of a window equipped with my improvements. Fig. 2 is a vertical section taken through the same. Fig. 3 is a horizontal section taken on the line *xx*, Fig. 1. Fig. 4 is an underneath view of the lock mechanism, shown partly in section. Fig. 5 is a vertical section taken on the line *yy*, Fig. 4.

Similar reference characters indicating corresponding parts in the views, let the numeral 5 designate the lock-casing, which is attached to the top of the lower sash of the window by means of suitable fastening devices, screws being shown in the drawings. Within this casing are located two bolts 6, whose shanks 6^a are provided with recesses, in which are located coil-springs 7. One extremity of each spring bears against the bottom of the recess, while its opposite extremity engages the wall of the casing. These springs normally hold the bolts in the locking position or that shown by dotted lines in Fig. 5. When in this position, the bolts protrude from the casing and engage rack-bars 8 and 9, respectively, the one being attached to the window-frame above the lower sash and the other to the upper sash adjacent the lock-casing. These racks may be of any necessary or desired length. They are provided with recesses

or notches adapted to receive the bolt extremities. The upper and lower walls of the notches in the bar 8 are horizontal. Hence when engaged by the bolt the sash cannot be moved in either direction. The notches of the rack-bar 9 have horizontal upper walls, their lower walls being beveled or inclined to permit the upper sash to be raised, but to prevent its being lowered while the bolt is in the locking position. These racks allow either or both sash to be locked in the open position. When so locked, the lower sash cannot be moved in either direction. The upper sash may be raised, but not lowered or opened. This construction makes it safe to leave the sash open sufficiently for proper ventilation purposes, but not wide enough to permit the entrance of a person from the outside.

The bolts are simultaneously withdrawn from the racks or unlocked by a cam 10, having two wings adapted to engage projections 6^c, formed on the inner extremities of the bolts. This cam has two journals, one of which engages the upper part of the casing, while the other engages a recess formed in the top of the lower sash. The upper journal is extended to form a screw-post 12, to which is applied a small lever-arm 13. When the bolts are in the locking position, the cam is in the position indicated by dotted lines in Fig. 4, corresponding with the dotted-line position of the bolts. To unlock the bolts, it is only necessary to turn the cam to the position shown by full lines. When in this position, the cam is practically on a dead-center and holds the bolts against outward movement until it is desired to return them by reversing the movement of the cam. The casing is provided with two lugs 14, which engage the cam and form stops to prevent it from moving farther than the position shown in Fig. 5.

Having thus described my invention, what I claim is—

1. The combination of a suitable casing, two oppositely-disposed bolts located therein and arranged to slide in the same plane but in opposite directions, each bolt having a cylindrical recess bored in its shank, a coil-spring located in the recess of each shank, one extremity of each spring bearing against the side of the casing, the bolts being arranged to leave a central space in the casing, and each

being provided with a projection 6° located adjacent this central opening, a bar attached to the window-frame above the lower sash, and provided with notches, another bar attached to the upper sash and provided with notches, the two bolts being adapted to respectively engage the notches of the two bars, a double operating-cam located in the central space between the bolts and adapted to engage the projections formed on the bolt extremities, and a lever-arm for actuating the cam.

2. In a sash-fastener, the combination of a suitable casing, two oppositely-disposed, spring-actuated bolts, located therein and arranged to slide in the same plane but in opposite directions, the bolts being arranged to leave a central space in the casing, and each being provided with a projection located ad-

jacent the central opening, a bar attached to the window-frame above the lower sash and provided with a series of notches, another bar attached to the upper sash and provided with a series of notches, the two bolts being adapted to respectively engage the notches of the two bars, a double cam located in the central space between the bolts and adapted to engage the projections formed on the bolt extremities, said cam being arranged to assume a dead-center position when the bolts are withdrawn, and a lever-arm for actuating the cam.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN H. METZ.

Witnesses:

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