

(No Model.)

S. McLEAN.

FASTENER FOR THE MEETING RAILS OF SASHES.

No. 434,520.

Patented Aug. 19, 1890.

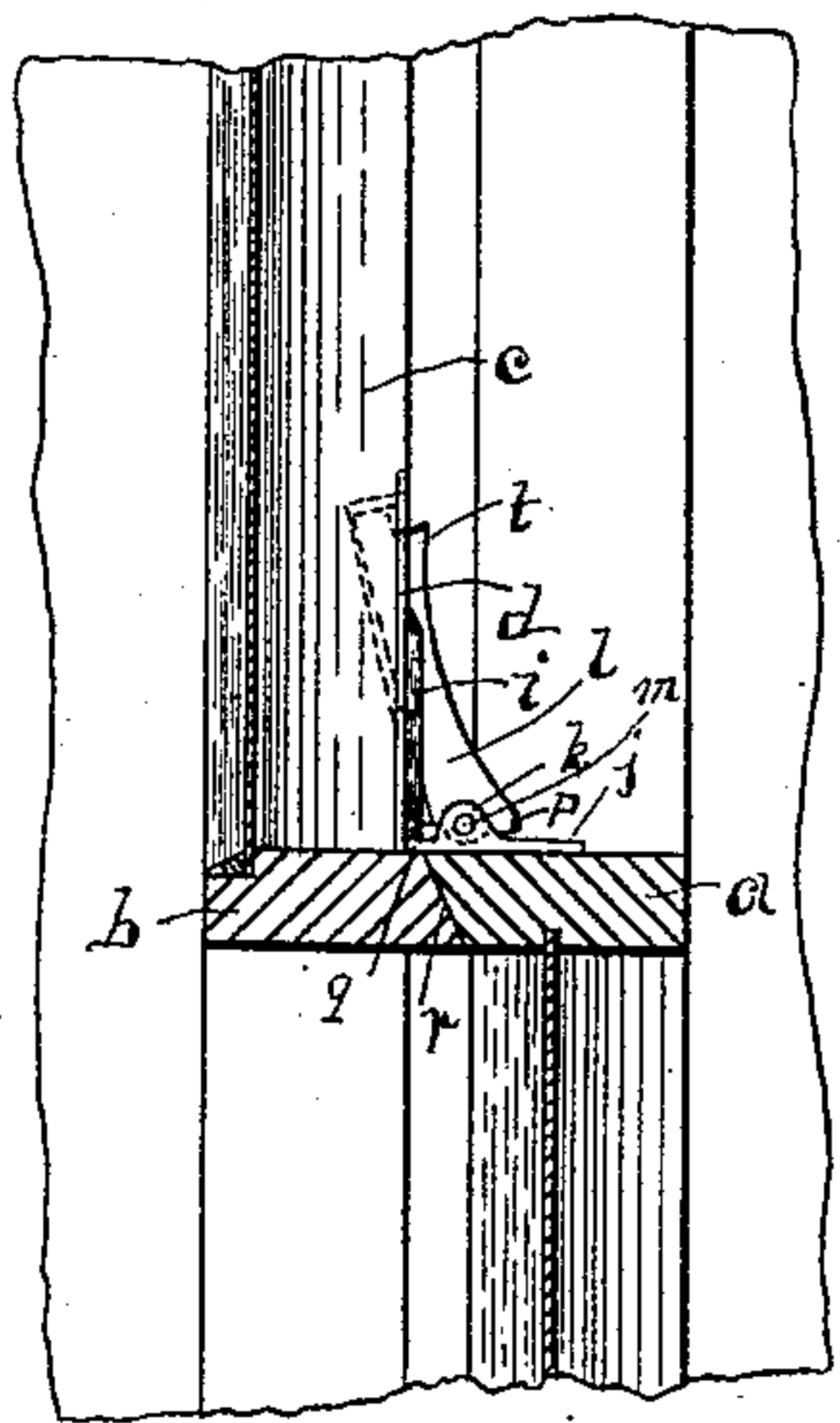


Fig. 3.

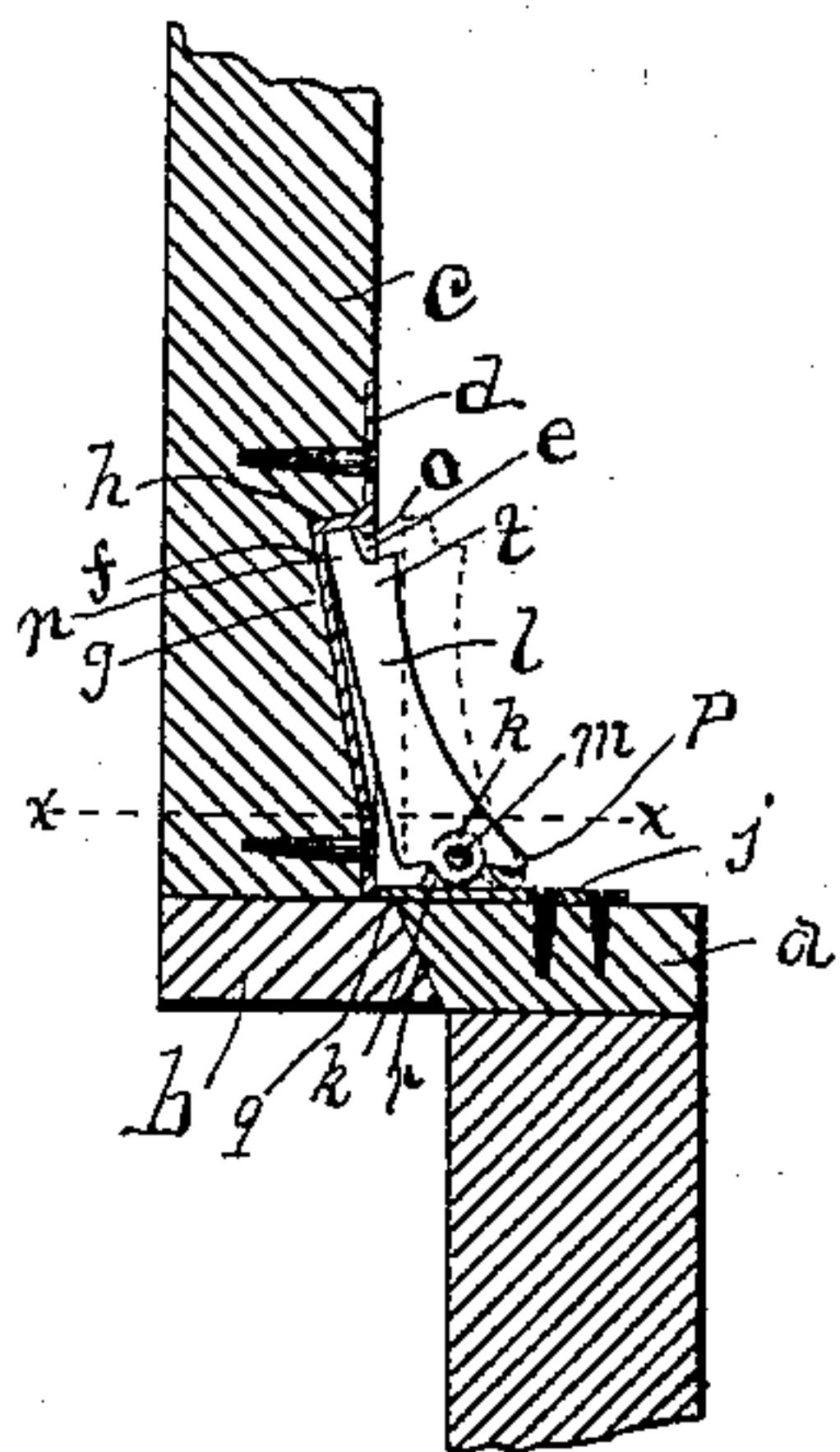


Fig. 2.

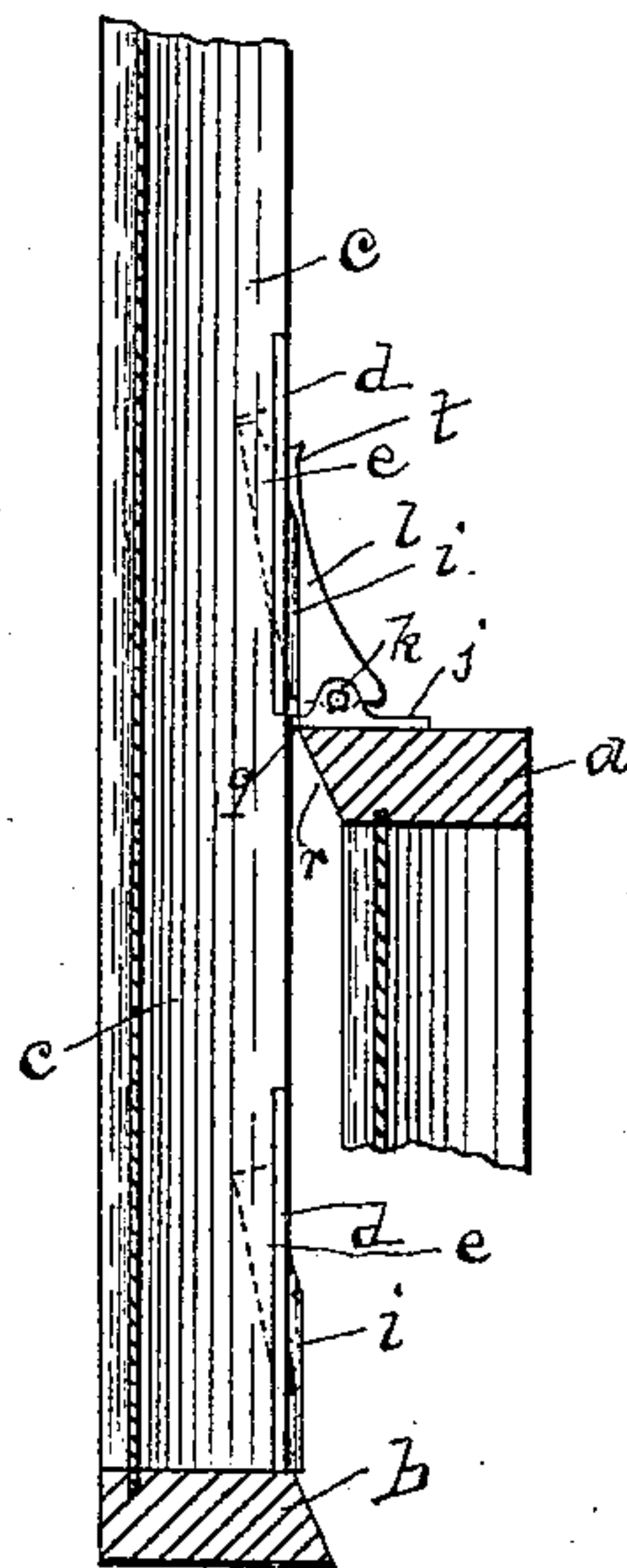


Fig. 4.

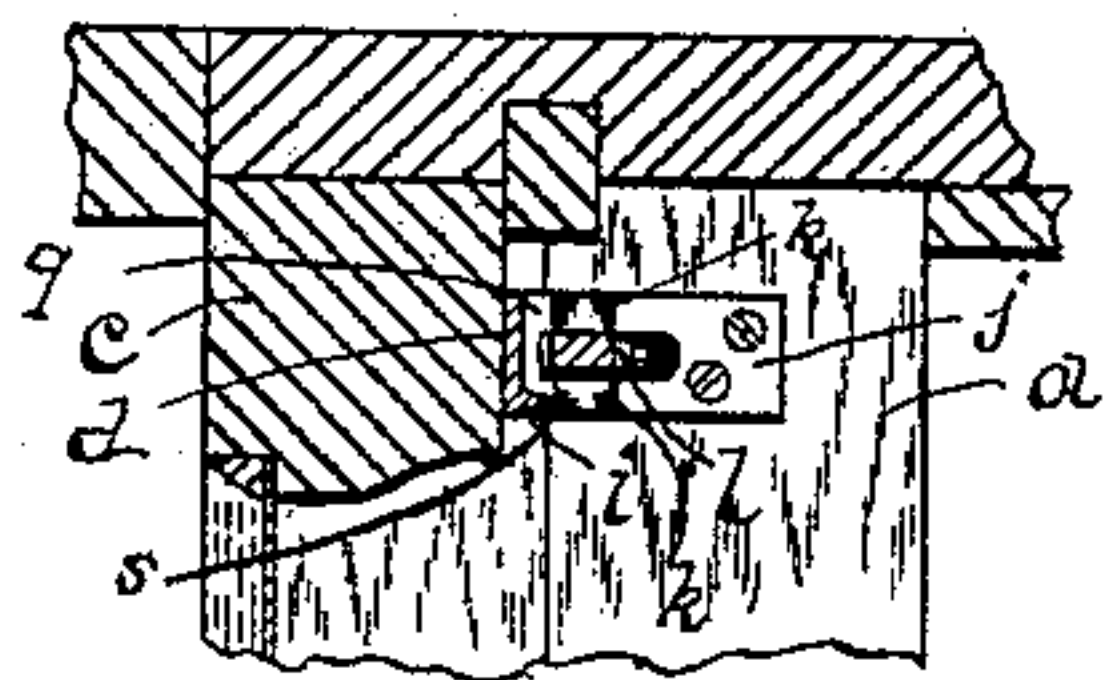


Fig. 5.

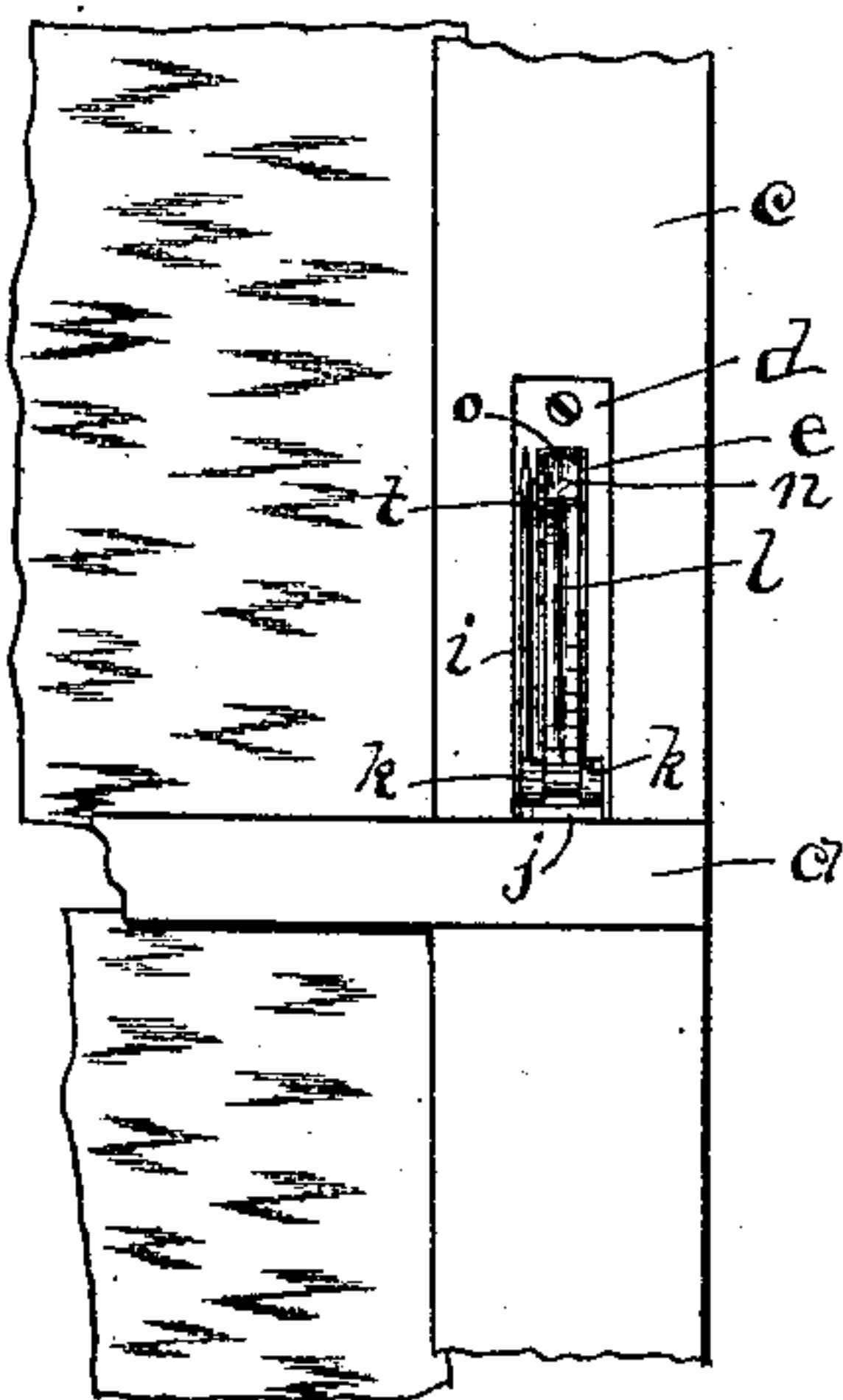


Fig. 1.

ATTEST-

G. P. Thomas

F. A. McKay

INVENTOR-

Seth McLean

By Jas. C. Thomas Atty.

# UNITED STATES PATENT OFFICE.

SETH McLEAN, OF BAY CITY, MICHIGAN.

## FASTENER FOR THE MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 434,520, dated August 19, 1890.

Application filed November 26, 1889. Serial No. 331,701. (No model.)

### *To all whom it may concern:*

Be it known that I, SETH McLEAN, a citizen of the United States, residing at Bay City, in the county of Bay and State of Michigan, 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 letters of reference marked thereon, which form a part of this specification.

My invention relates to the class of window-locking devices which are commonly applied to the meeting-rails of the upper and lower sashes for locking both sashes in position at the same time; and the invention consists in the construction and arrangement of the device, and in the combination of the parts, as I shall hereinafter describe, and specifically point out in the claim of this specification.

The chief object of my invention is to produce a cheap and simple device for locking window-sashes in any desired position, which will resist a great strain and be automatic in its locking operation.

Another object of the invention is to arrange a locking device for securing the sash of a window in position, which cannot be unlocked from the outside, by passing a thin piece of metal between the meeting-rails of the sash.

I illustrate the device with which I attain these objects in the accompanying drawings, in which will be found similar letters of reference indicating the same parts throughout the several views.

Figure 1 represents a front view in elevation of a portion of the window-sash with my improved locking device attached thereto. Fig. 2 is a vertical section of the same. Fig. 3 is a vertical section of the sash with a side view of my improved device attached. Fig. 4 is the same, but showing the sash arranged for ventilating the room. Fig. 5 is a section taken at *xx* in Fig. 2.

*a* represents the meeting-rail of the lower sash. *b* is the meeting-rail of the upper sash, and *c* is the vertical stile of the same.

*d* is a plate provided on its front face with

a pocket *e*, and is secured by suitable means to the stile *c*. The portion *f*, which forms the pocket, is raised from the rear side of the plate, and a mortise *g* is formed in the stile to receive the portion, the upper end *h* of which is at nearly a right angle with the plate and forms a shoulder which rests against the upper end of the mortise *g*.

*i* is a vertical rib raised outwardly from the face of the plate *d* on the side of the pocket which is nearest the glass contained in the sash.

*j* is a base-plate secured to the upper or top surface of the meeting-rail *a*, and *k* are ear-portions projecting upwardly from the base-plate, and between these ear-pieces is placed the lower end of a dog or pawl *l*, and the dog is held in position by a pivot *m* passed through the ear-pieces and the pawl. The upper end *n* of the dog is arranged to lie in the pocket *e* when the sashes are in position for closing the window, with the upper end thereof against the upper end *o* of the pocket, and the ear-pieces are so located as to permit the dog to lie at an incline toward the pocket, and the metal in the dog is so disposed that the gravity thereof will overhang its pivotal point, so that when the free end of the dog is withdrawn from the pocket to permit the sash to be moved the gravity of the overhanging portion will cause the free end of the dog to oscillate toward and lean against the upper stile until the pocket is in a proper position to receive the dog, and on this position being attained the free end of the dog will pass into the pocket without further attention or manipulation and the outer portion *p* of the pivotal end of the dog is also arranged to project downwardly, so that when the free end of the dog is in a position to clear the stile the portion *p* will be resting upon the upper surface of the base-plate, so that the pivotal center of the dog will always be in front of the weight which renders the engagement of the dog with the pocket automatic, and the projecting portion *p* is also useful and convenient for manipulating the dog with the hand to unlock the sash. The upper end *t* of the dog is arranged to project outwardly to form a convenient means of catching the dog with the fingers, if desired, to disengage the dog from the pocket. The inner edge *q*



of the base-plate is arranged to extend across the joint *r* between the meeting-rails and to reach over the rail *b* to the face of the plate *d*, a portion *s* of one side of the edge *q* being cut out to allow the projecting rib *i* to pass the plate, and by this arrangement of the plate and rib the dog is secured, when in a position for locking the sash, against being unlocked by passing a thin piece of metal through the joint *r* between the rails and raising thereby the dog from engagement with the pocket, the jamb of the window-frame acting as a guard for the opposite side.

As shown in Fig. 4, a second plate may be placed on the stile a short distance above the first plate, and the upper sash may be lowered or the lower sash may be raised to bring the dog into engagement with the second pocket, and an opening will be formed above or below the sash for ventilation, and the sash will then be securely locked, as before, the opening of course not being large enough to allow a person to crawl in or to allow the dog to be raised from the outside of the window.

It will be noticed that the construction of my improved device is such that great strength of the parts is obtained, although of small dimension, the pocket projecting into the mortise forming a solid and firm support for the plate, while the dog, resting with one end in the pocket and the other upon the base-plate, forms a brace between the two sashes that requires great power to break or to force the sashes apart, while when the dog is disengaged from the pocket it is in a nearly vertical position, and bears so lightly against the stile that when the sashes are moved for opening or closing the window no abrasion or mutilation of the paint can occur, and being automatic in its locking operation the device is exceedingly handy and convenient. It will be seen, also, that a great advantage is gained in automatically locking the sash when the window is partly open for ventilation, as no

attention need be given to locking the sash, for should the sash be left in a position that the dog is not in engagement with the pocket a slight movement thereof in either direction would cause the dog to drop into one of the pockets, so that a further movement of the sash to open the window would be impossible, and the window would be as securely locked when partly open as when entirely closed.

Of course several of the plates containing the pocket may be affixed to the upper sash, if desired, and the action of the dog will be the same in each; and while I have illustrated my device as applied to one side of the sash and with only one projecting rib to prevent the unlocking from the outside it may be placed on the central portion, if desired, and a second rib would be required on the opposite side of the pocket, as it being away from the jam would allow a thin piece of metal to be passed through the joint *r*, and the dog could thereby be lifted if the ribs were omitted.

What I claim as my invention is—

In a window-lock, the combination of the base-plate secured to the upper surface of the lower sash and with its inner edge projecting over the joint between the sash and provided with upwardly-projecting ear-pieces, a dog with its lower end pivoted between the ear-pieces, and a face-plate secured to the upper sash and provided with a recessed pocket to receive and engage with the upper free end of the said dog, and having, as described, a rib or flange projecting outwardly from the face of the plate beside the said pocket, for the purpose set forth, substantially as described.

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

SETH McLEAN.

Witnesses:

JAS. E. THOMAS,

G. P. THOMAS.