

No. 712,306.

Patented Oct. 28, 1902.

J. A. JOHNSON.  
SASH FASTENER.

(Application filed Aug. 27, 1900.)

(No Model.)

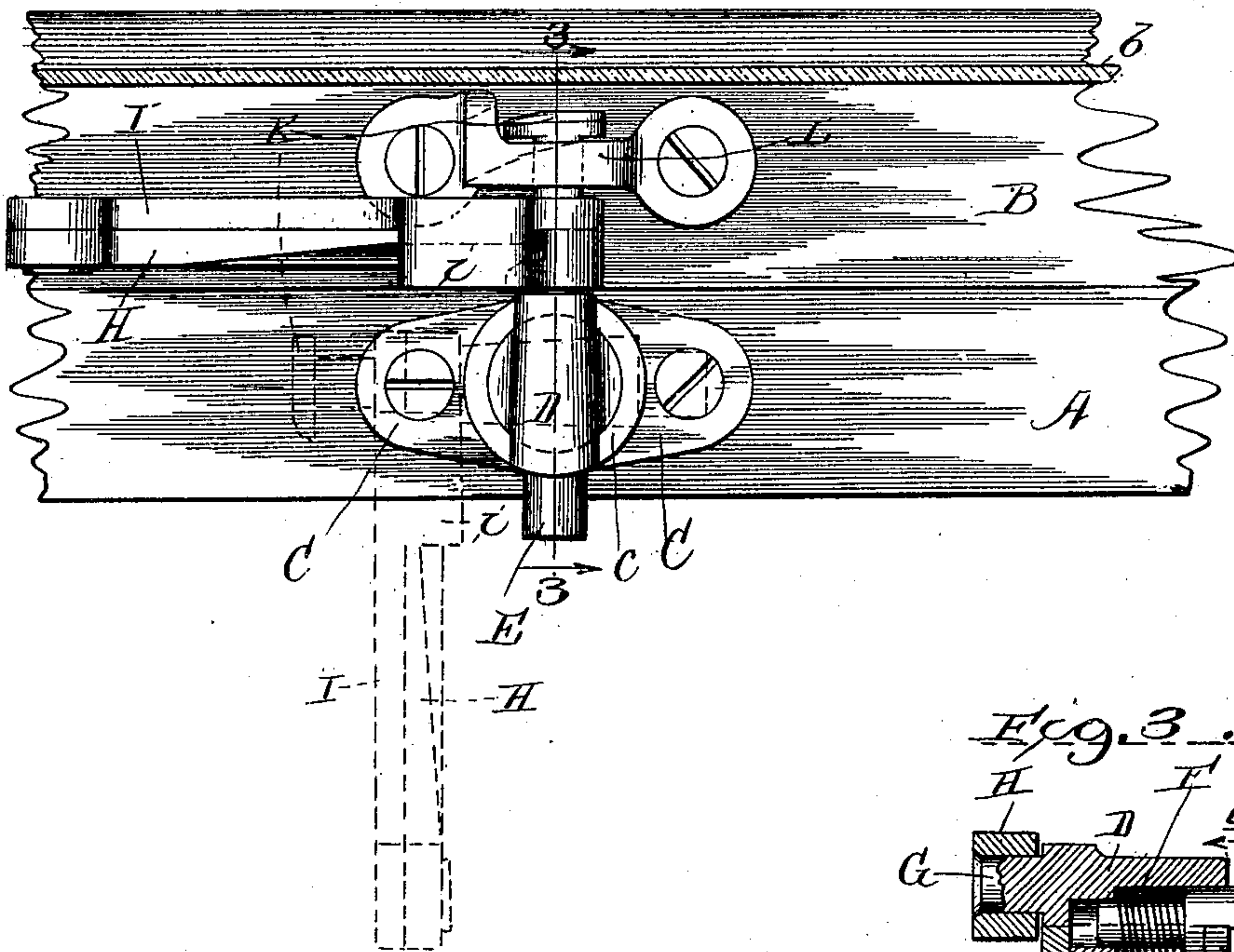


Fig. 1.

Fig. 2.

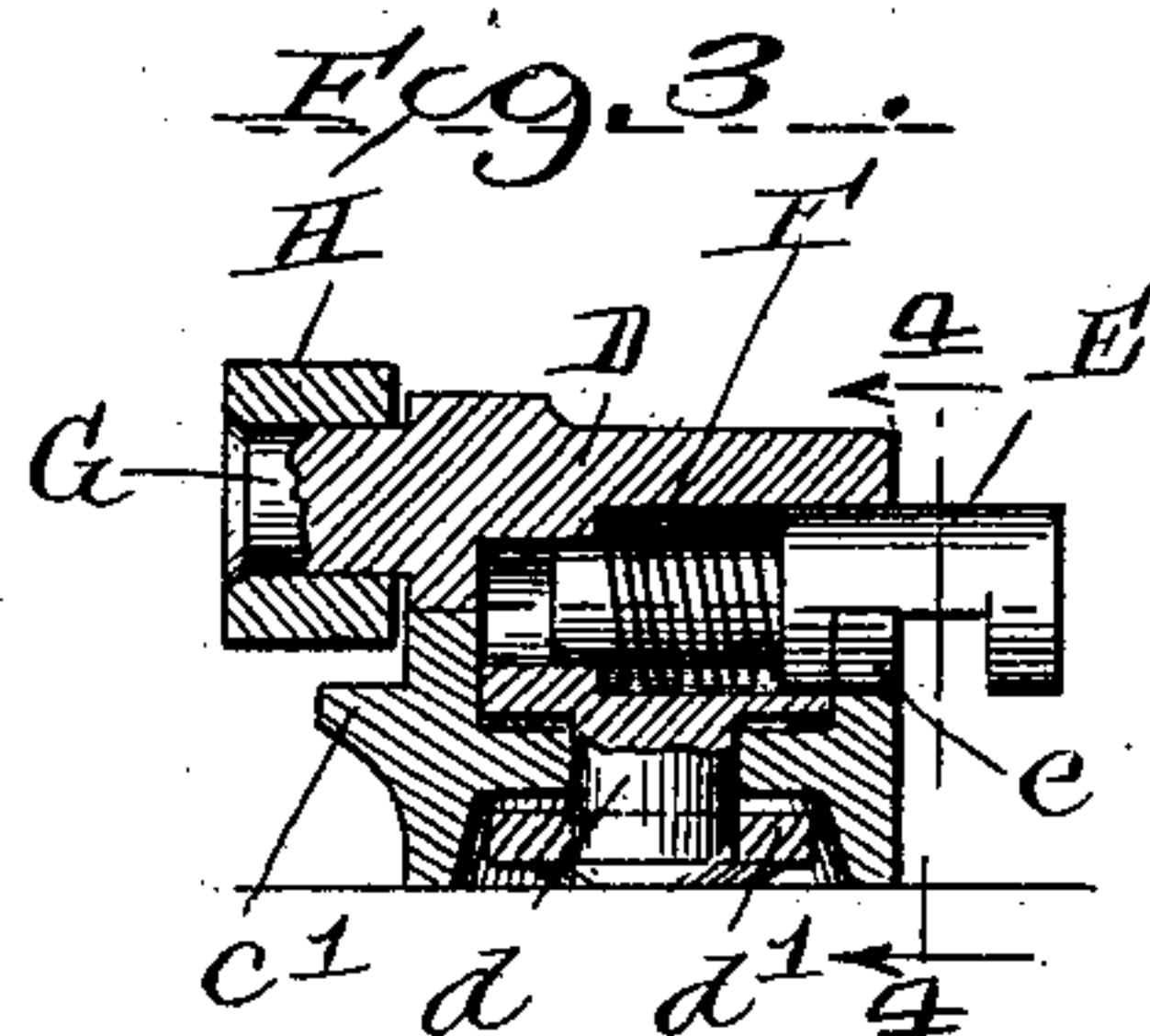
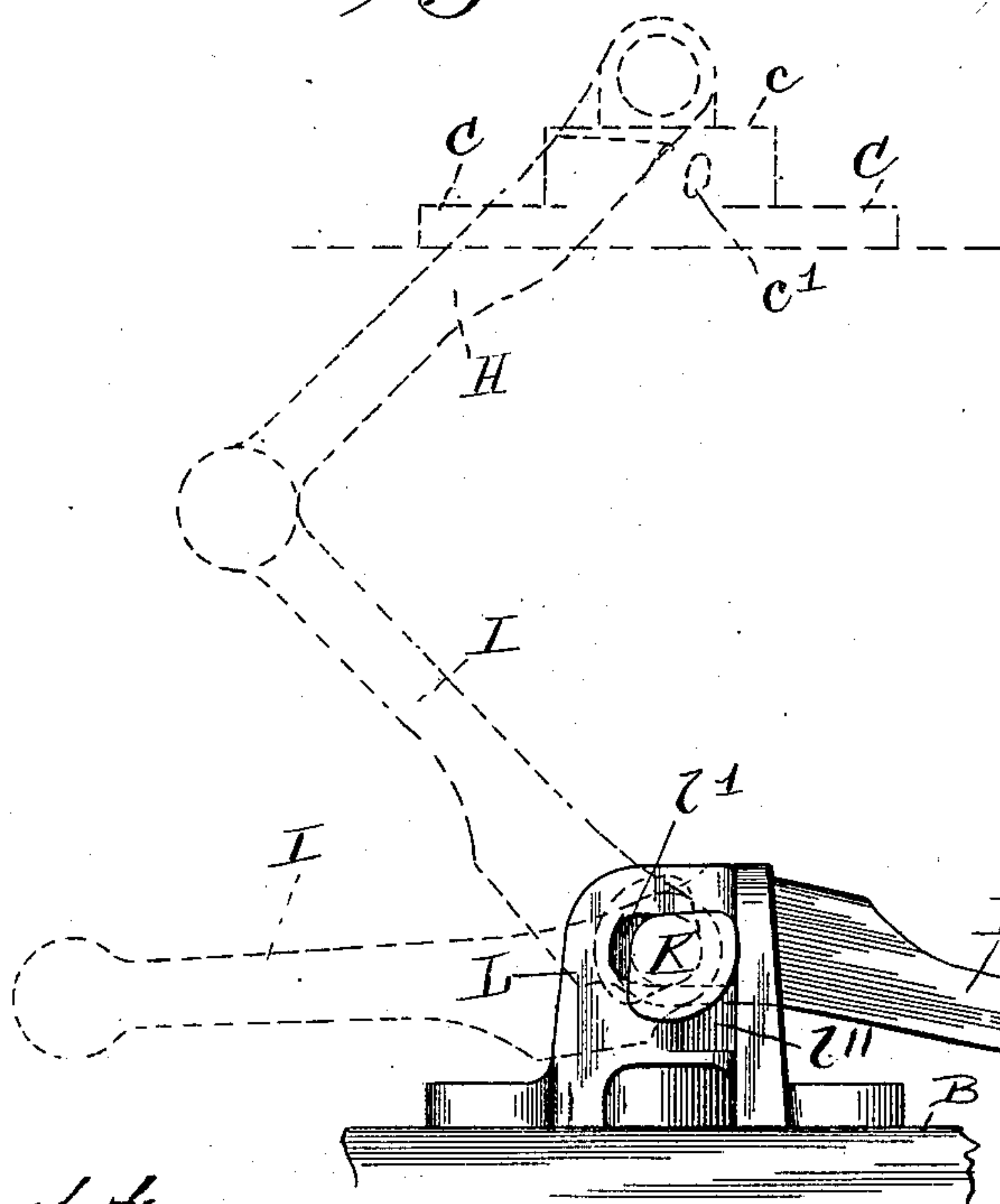
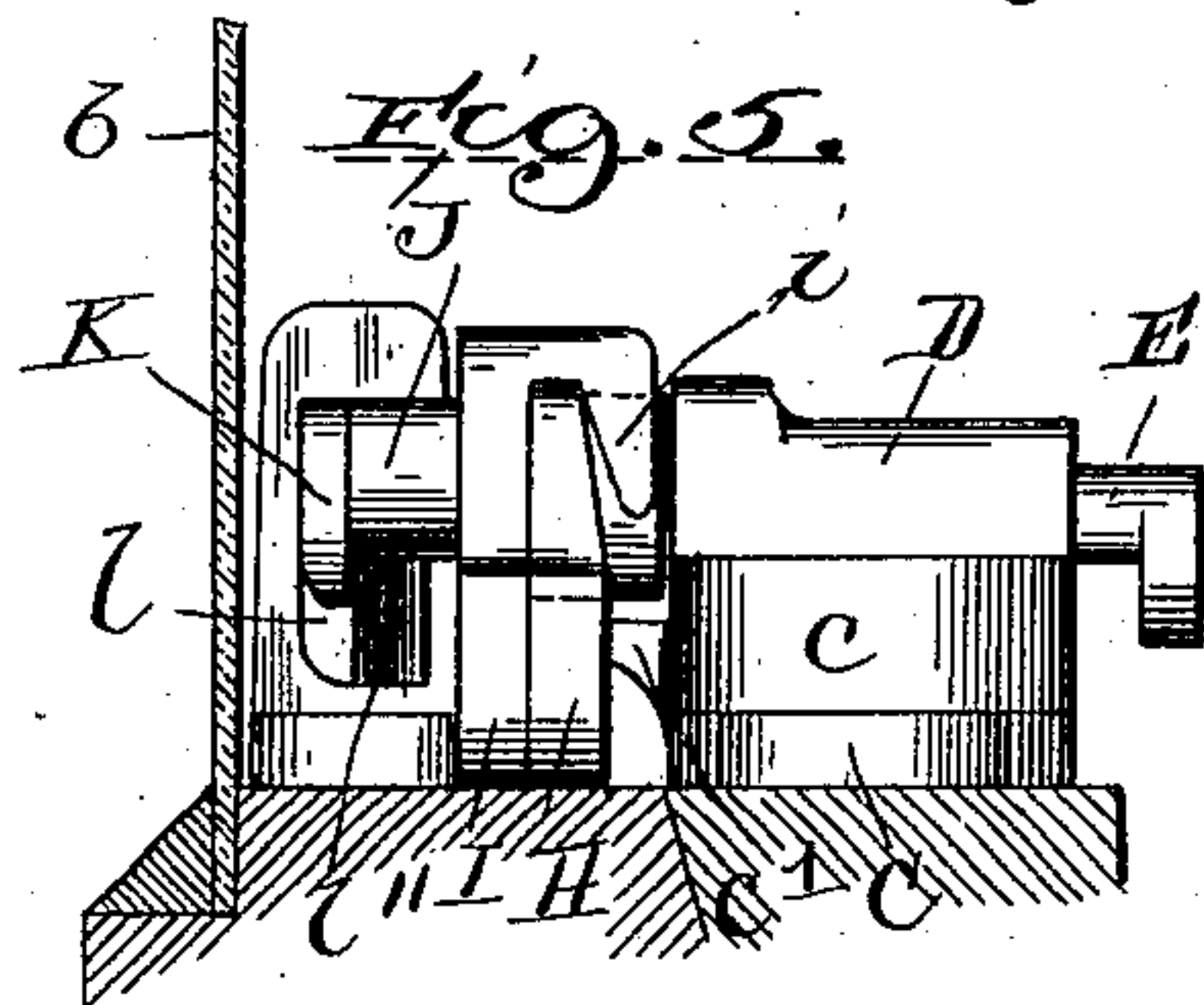
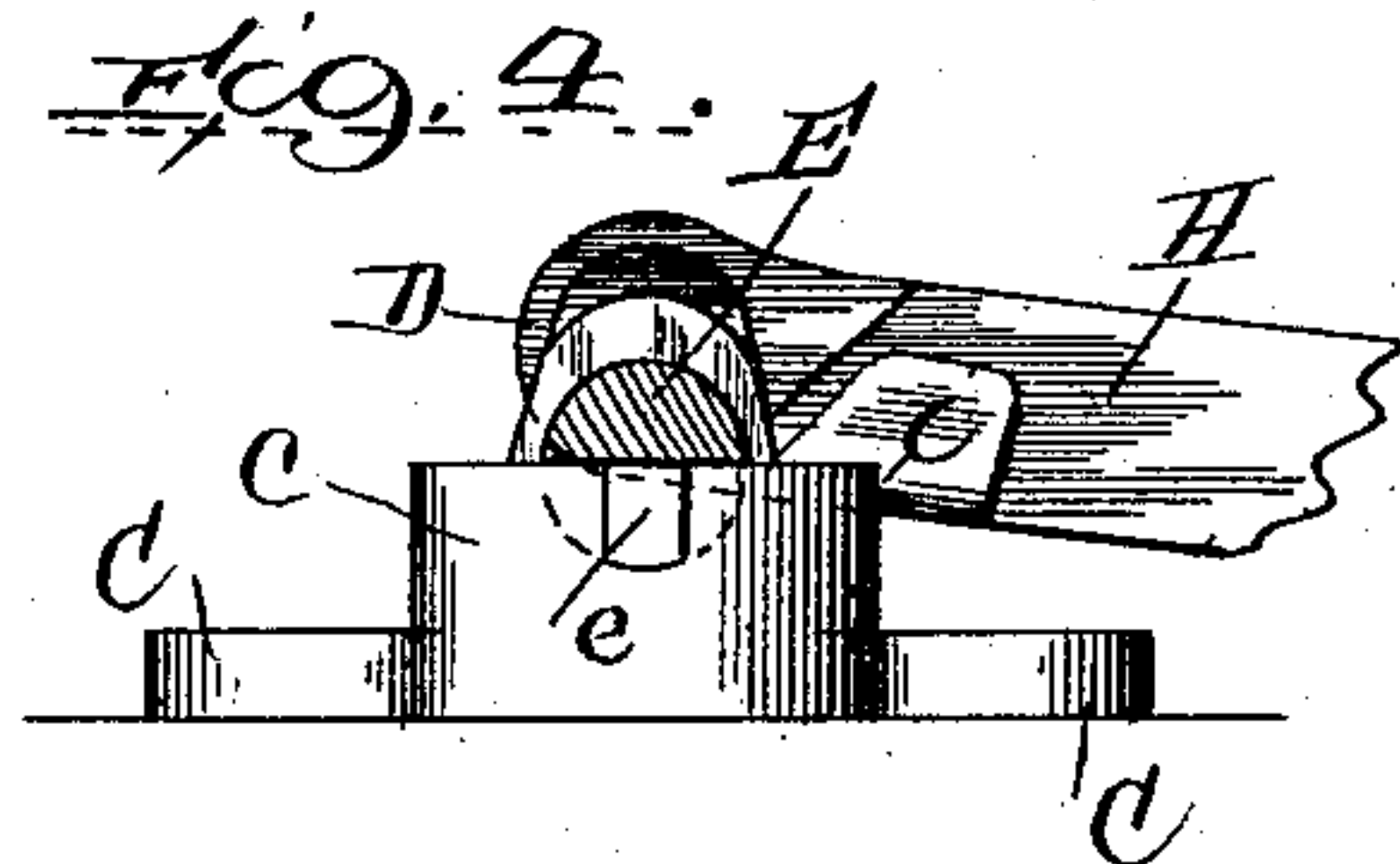


Fig. 4.



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# UNITED STATES PATENT OFFICE.

JOHN A. JOHNSON, OF CHICAGO, ILLINOIS.

## SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 712,306, dated October 28, 1902.

Application filed August 27, 1900. Serial No. 28,157. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. JOHNSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a specification.

The present invention relates to a sash-fastener of the class shown and described in United States Letters Patent No. 648,909, granted to me April 3, 1900.

The object of the invention is to provide an improved sash-fastener of the class aforesaid; and to this end the invention consists in the features of novelty that are hereinafter described with reference to the accompanying drawings, which are made a part hereof, and in which—

Figure 1 is a plan view of a sash-fastener embodying the invention, portions of the lower rail of the upper sash and upper rail of the lower sash being shown in plan view. Fig. 2 is an elevation thereof viewed from the outside of the sash. Fig. 3 is a vertical section of the parts that are carried by the upper rail of the lower sash, the plane of the section being indicated by the line 3 3, Fig. 1. Fig. 4 is a vertical section thereof on the line 4 4, Fig. 3. Fig. 5 is an elevation of the complete sash-fastener.

A is the upper rail of the lower sash, and B the lower rail of the upper sash. To the rail A is secured by means of screws a base-plate C, having a socket *c*, in which a block D is mounted so as to be capable of rotating about a vertical axis *d*. Said axis takes the form of a vertical stem or pin which passes through a corresponding opening in the bottom of the socket *c*, and receives below said socket a washer *d'*, below which the head of the stem is upset in order to prevent it from being withdrawn from the washer. The block D has within it a socket in which is disposed the stem of a latch E, said stem being surrounded by a coiled spring F, which tends normally to force the latch outward and cause a tooth *e* to engage a notch in the side of the socket *c*. By means of this latch the block D, when the tooth *e* is in engagement with the notch as aforesaid, is held against rotation, while at the same time by pressing inward on the outer end of the latch the block may

be disengaged, so that it may be turned about its vertical axis, the positions of the parts after the block has been turned ninety degrees from the position shown by full lines in Fig. 1 being in said figure indicated by dotted lines.

The block D carries a boss or trunnion G, to which is pivoted one end of a link H, the other end of which is pivotally connected to one end of a second link I. The other end of this link I carries a stud J, having an enlarged head K, adapted to be engaged with or disengaged from a bracket L, secured to the lower rail B of the upper sash. This bracket L is of such shape that when the links H and I are brought to parallelism and to the position shown by full lines in the several figures of the drawings the block D may be turned about its vertical axis in the manner already described. In turning it from the position indicated by dotted lines in Fig. 1 to the position shown by full lines in said figure the enlarged head K of the stud J will pass through an open slot *l* in the side of the bracket L, so as to bring the stud J into a horizontal opening *l'*, formed through the bracket. The outer face of the bracket below the opening *l* is provided with a cam-surface *l''*, with which the head K engages as it is being moved from the position indicated by dotted lines to the position shown by full lines in Fig. 1, and the effect of this cam-surface is to draw the two sashes together. The parts having been brought to the positions shown by full lines in the several figures, the enlarged head K will be behind the bracket, and by throwing the links from the positions shown by full lines to the extreme position indicated by dotted lines in Fig. 2 the enlarged head may be brought to such position that it cannot thereafter without first returning the links to the positions shown by full lines be withdrawn through the open slot *l* by rotating the block D. In fact, the shape of the opening *l* and the shape of the head K are such that any movement from the position shown by full lines in Fig. 2 toward the extreme position indicated by dotted lines in said figure will effectually lock the parts, so that the head cannot be disengaged from the bracket.

In the manner and for the purpose shown and described in my patent aforesaid one of



the links is provided with a hook *i*, which overhangs and engages the other.

The socket *c* is provided with a stop *c'*, which is adapted to engage the link *H* and prevent the pivotal connection between the two links from passing a straight line drawn between their centers of motion.

Preferably the bracket *L* is secured to the rail *B*, so that it has contact with the glass *b*. The object of this is to cause the bracket to break the glass in case it be attempted to pry up the lower sash without first disengaging the stud *J* from the bracket *L*. This breaking of the glass will result when the upward strain becomes sufficient to throw the bracket *L* out of its true upright position.

Manifestly the fastener above described may be used on doors as well as on windows, and in this use will take the place of the chain-bolt so commonly used for permitting doors to be opened a limited distance. Without any alteration whatever it is applicable to sliding doors, and where it is desirable to apply it to an ordinary swinging door it will simply be necessary to make the joint between the links *H* and *I* rather loose, so as to permit of the curved movement of the free edge of the door.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a sash-fastener the combination of a pair of links pivoted together, a part revoluble about a vertical axis to which one end of one of said links is pivoted, whereby the links may be moved in a vertical plane independently of said revoluble part and whereby said links may be moved bodily with said revoluble part about its vertical axis, means rotatively connecting said revoluble part with one of the sashes, a bracket carried by the other sash and means carried by the other link and adapted to engage and disengage said bracket when the links are moved bodily with said revoluble part about its vertical axis, substantially as set forth.

2. In a sash-fastener, the combination of a pair of links pivoted together, a block to which one of the links is pivoted, a socket secured to one rail of the sash, means for rotatively connecting said block and socket so that the block may turn in a horizontal plane, a latch under the control of the operator for connecting and disconnecting the block and socket, a bracket carried by the other sash, and means carried by the other link for engaging and disengaging the bracket when the block is rotated, substantially as set forth.

3. In a sash-fastener the combination of a pair of links pivoted together, a part revoluble about a vertical axis to which one end of one of said links is pivoted, whereby the links are adapted to move in a vertical plane independ-

ently of said revoluble part and whereby said links may be moved bodily with said revoluble part about its vertical axis, means for rotatively connecting said revoluble part with one of the sashes, a stud having an enlarged head carried by the other of said links, a bracket carried by the other of the sashes and having a horizontally-disposed opening for receiving said stud when the links are moved bodily with said revoluble part about its vertical axis, said opening and said head being so shaped that the stud can enter or leave only when the links are in a given position substantially as described.

4. In a sash-fastener, the combination of the bracket *L* having the opening *l*, the opening *l'* and the cam-surface *l''*, means for securing said bracket to one of the sashes, a pair of links pivoted together, the stud *J* having the enlarged head *K* carried by one of said links, the block *D* to which the other of said links is pivoted, a socket to which said block is rotatively connected, and means for securing said socket to the other sash, substantially as set forth.

5. In a sash-fastener, the combination of a pair of links pivoted together, a part revoluble about a vertical axis to which one of said links is pivoted horizontally whereby the links may be moved in a vertical plane by said pivot independently of said revoluble part and whereby said links may be moved bodily with said revoluble part about its vertical axis, means rotatively connecting said revoluble part with one of the sashes, a bracket carried by the other sash and having an opening disposed horizontally and a stud carried by one of the links and having an enlarged head adapted to enter said opening when the links are horizontal and are moved bodily about the aforesaid vertical axis of the revoluble part, said bracket being adapted to engage the enlarged head of the stud and prevent it from leaving said opening, and thereby prevent the links from moving about said vertical axis when they are not horizontal, substantially as described.

6. In a sash-fastener, the combination of the bracket, *L*, having the opening, *l*, and the opening, *l'*, means for securing said bracket to one of the sashes, a pair of links pivoted together, the stud, *J*, carried by one of said links and having the enlarged head, *K*, a part revoluble about a vertical axis to which the other of said links is horizontally pivoted, and means rotatively connecting said part with the other sash, substantially as described.

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Witnesses:

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