

(No Model.)

R. ALLEN.
KEY FASTENER.

No. 287,991.

Patented Nov. 6, 1883.

Fig. 1.

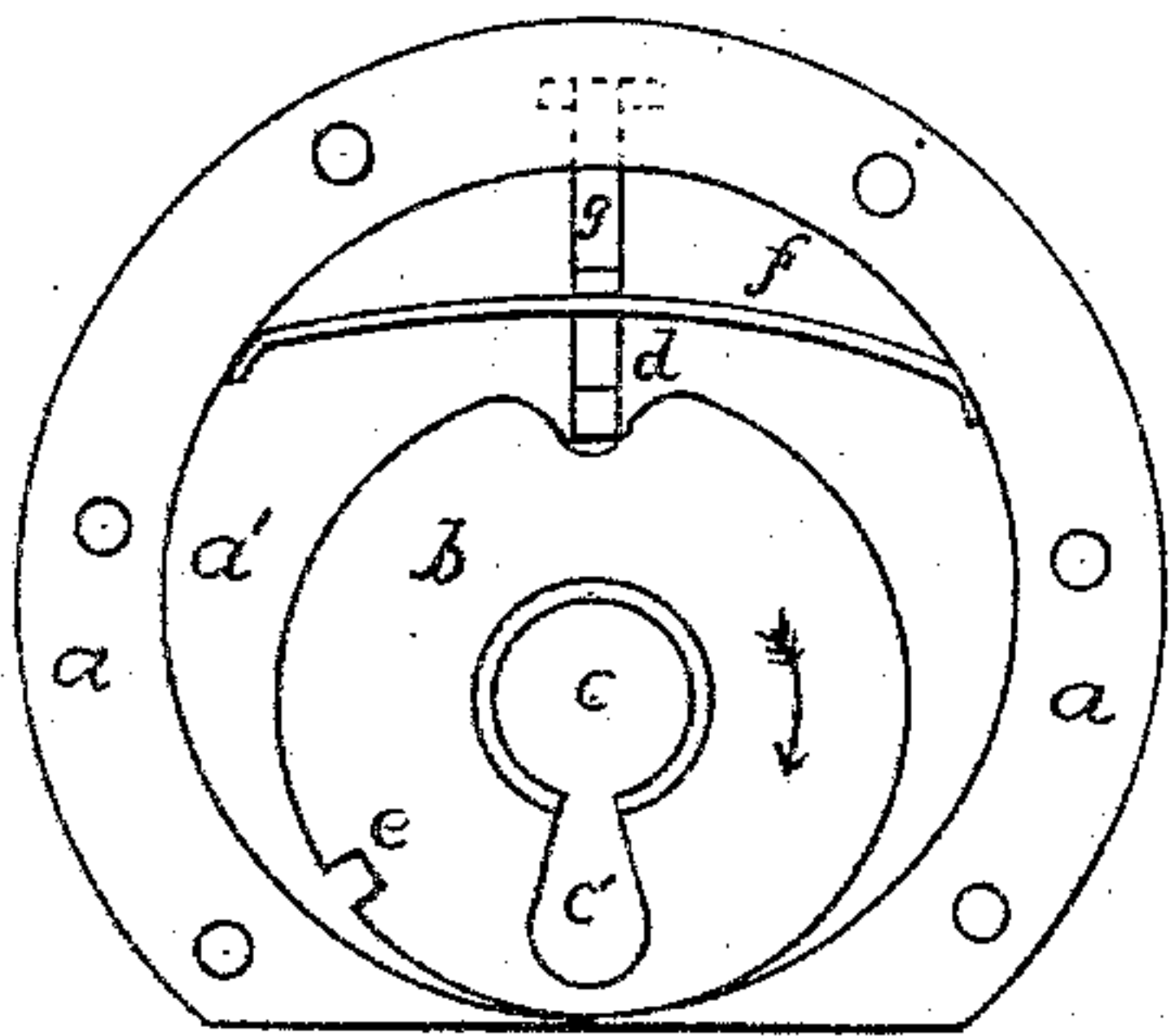


Fig. 2.

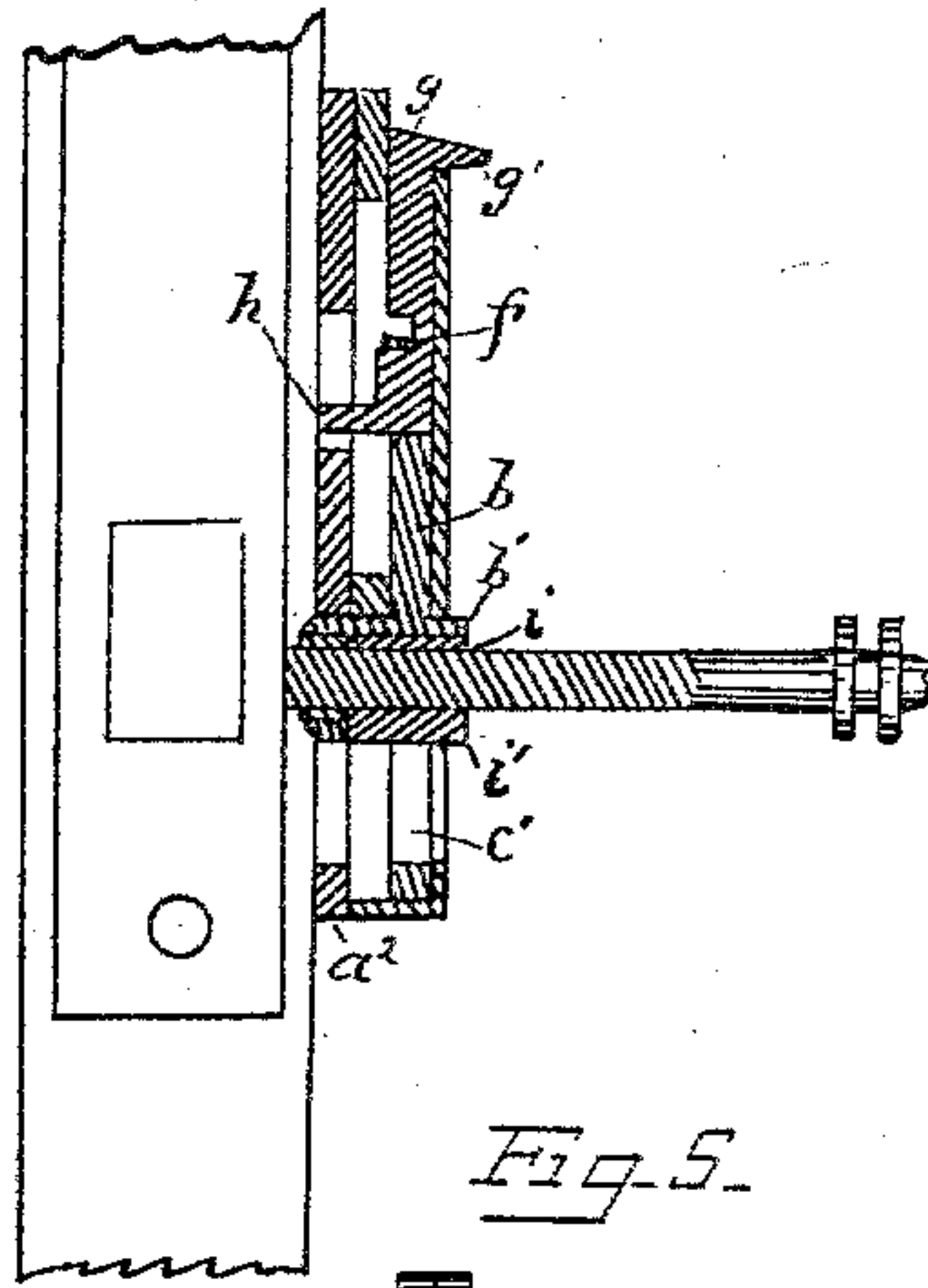


Fig. 5.

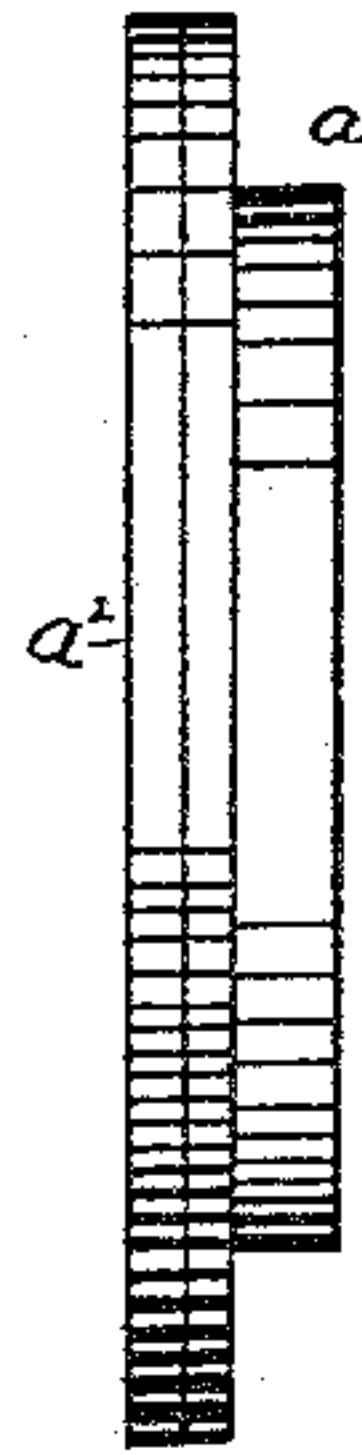


Fig. 6.

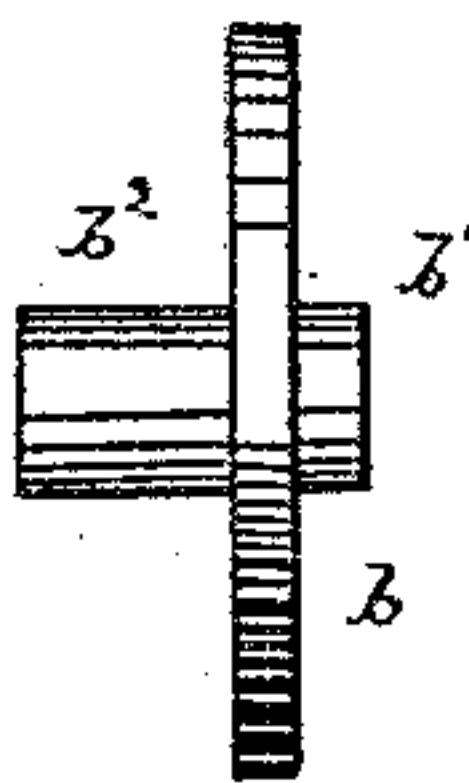


Fig. 3.

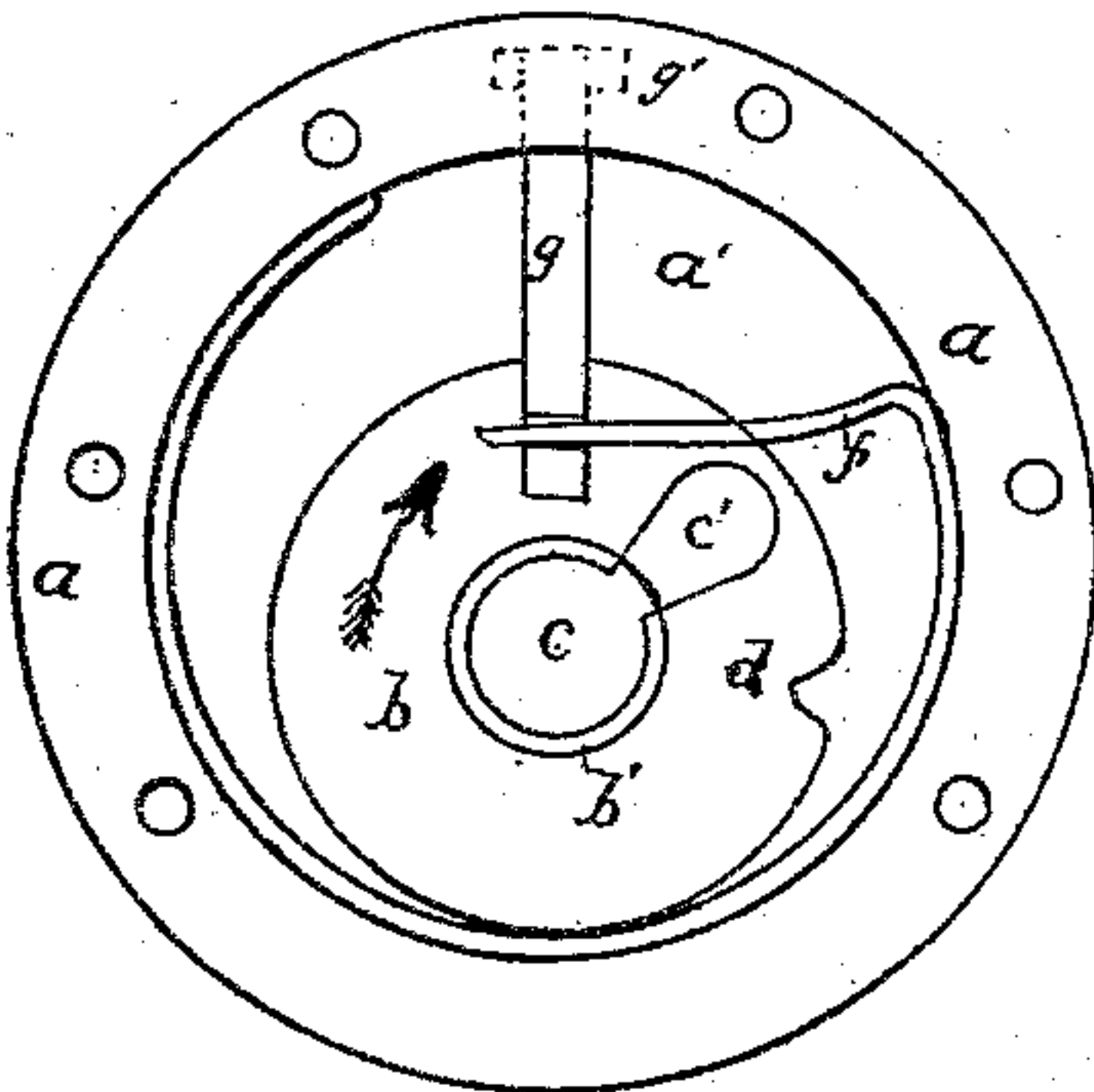


Fig. 4.

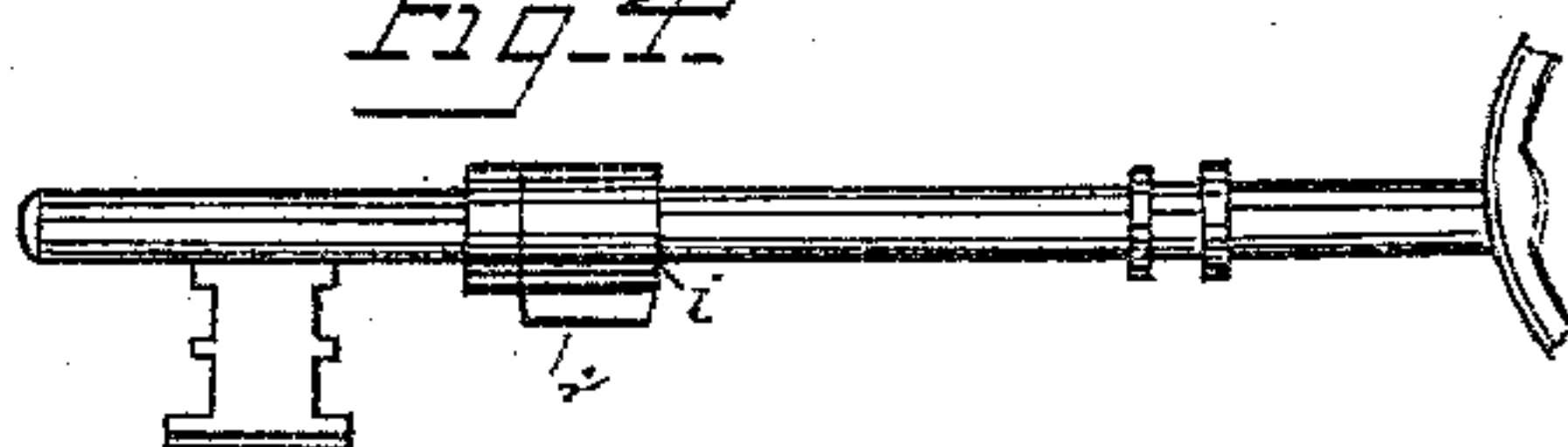
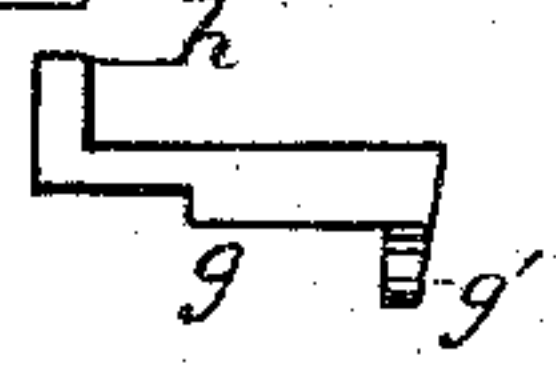


Fig. 7.



WITNESSES.

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UNITED STATES PATENT OFFICE.

RICHARD ALLEN, OF FREDERICKSBURG, VIRGINIA, ASSIGNOR OF ONE-HALF
TO JAMES F. THOMPSON, OF SAME PLACE.

KEY-FASTENER.

SPECIFICATION forming part of Letters Patent No. 287,991, dated November 6, 1883.

Application filed August 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, RICHARD ALLEN, a citizen of the United States, residing at Fredericksburg, in the county of Spottsylvania and State of Virginia, have invented certain new and useful Improvements in Key-Fasteners; and I do hereby 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.

This invention relates to devices for holding a key from being turned in the lock; and it consists in certain details of construction, as hereinafter pointed out and claimed.

The object of the invention is to produce a simple device for the purpose which may be attached to any lock.

In the drawings forming part of this specification, Figure 1 is an elevation showing the inside mechanism of my key-fastener. Fig. 2 is a section of the same, showing the device applied to a lock and the key in position. Fig. 3 is a view similar to Fig. 1 of a modification. Fig. 4 shows a key with collar and spline. Fig. 5 is a side view of the casing; Fig. 6, a similar view of the disk; Fig. 7, a view of the slide.

a represents a casing of sheet metal, in appearance somewhat like an escutcheon. This casing is preferably struck up, but may be cast of light metal, and contains a recessed portion, *a'*. A key-hole, *c c'*, passes through the casing, and when applied to a lock the key-hole in the casing comes in line with the key-hole in the door or lock. The casing may be secured to a door-lock by screws. To make the device complete, an inside plate, *a²*, may be applied, in which case the operating parts will be inclosed between the plates *a a²*.

b is a disk with a key-hole, *c c'*, therein. A collar, *b' b²*, projects from each side of the disk. This collar is preferably integral with the disk, and is slotted or broken away at the narrow part of the key-hole. The disk *b* is placed in the recess *a'*, and the collar *b²* passes through the large part of the key-hole in plate *a*. The disk *b* has a notch, *d*, in its edge, which notch has inclined shoulders, and another notch, *e*, having square shoulders. A sliding piece, *g*, is placed in the recess *a'*, and has a projection, *g'*, which passes through a hole in plate *a*,

forming a finger-piece outside said plate or casing. A spring, *f*, serves to slide this piece in toward disk *b*, so that it has a tendency to drop into either notch in the disk which may be opposite the sliding piece. The key has a collar, *i*, and spline *i'* at such distance from the end and bit that the spline will enter the slot in collar *b' b²* when the key is in place in the lock. (See Fig. 2.)

When the device is applied to the door or lock, the key-hole in plate *a* and that in disk *b* is in line with the key-hole of the lock. At the same time the slide *g*, pressed inward by spring *f*, engages notch *d* in disk *b*. The key may now be passed into the lock. On turning the key the spline *i'* thereon turns the disk *b*, the inclined sides of the notch *d* permitting the disk to force back the slide *g*. As soon as disk *b* has turned far enough to bring notch *e* under the slide, the latter, pressed down by its spring, will fall into notch *e* and hold the disk from turning farther. This happens at the moment when the lock is fully locked. The disk *b* is now held from rotation by slide *g*, and by its engagement with the spline on the key holds the same from being turned by nippers from the outside. The key is now in such position against the bolt of the lock that the same cannot be picked. When it is desired to turn the key, the slide *g* is lifted by the latch *g'* until it is out of notch *e*, when the key and disk are free to turn.

When the plate *a²* is used, the key-hole therein which is in line with that in plate *a* serves as a bearing for collar *b²*, and the disk *b*, the spring, and the main part of slide *g* are inclosed between the two plates. The slide *g* may have an extension which enters a slot in plate *a²*, as shown in Fig. 2, which serves as a guide or support to said slide.

I am aware that a key-fastening device has been known in which a notched disk was used, which closed the key-hole when turned to locking position. In such case the key had a spring-catch which engaged with the escutcheon. I do not claim such a construction.

I claim—

1. The combination of the inclosing-plate *a*, provided with a key-hole, the disk having key-hole to register therewith, said disk being notched at *d e*, as shown, and the sliding

spring-catch g , adapted to engage with said disk, all arranged to engage with splined key, as and for the purpose set forth.

2. The combination of the inclosing-plates
5 $a a^2$, provided with key-holes, the round parts of which serve as bearings for the collar $b' b^2$, the notched disk b , having key-hole and slotted collars, and arranged with reference to plates $a a^2$, as shown, and the slide g , actuated by a

spring, and having a projecting finger-piece, 10 g' , outside the casing, all arranged to operate with a splined key, and operating as set forth.

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

RICHARD ALLEN.

Witnesses:

JNO. A. ENGLISH,
WM. B. GOOLRICK.