

(No Model.)

T. W. DOYLE.
KEY FASTENER.

No. 494,555.

Patented Apr. 4, 1893.

Fig-1-

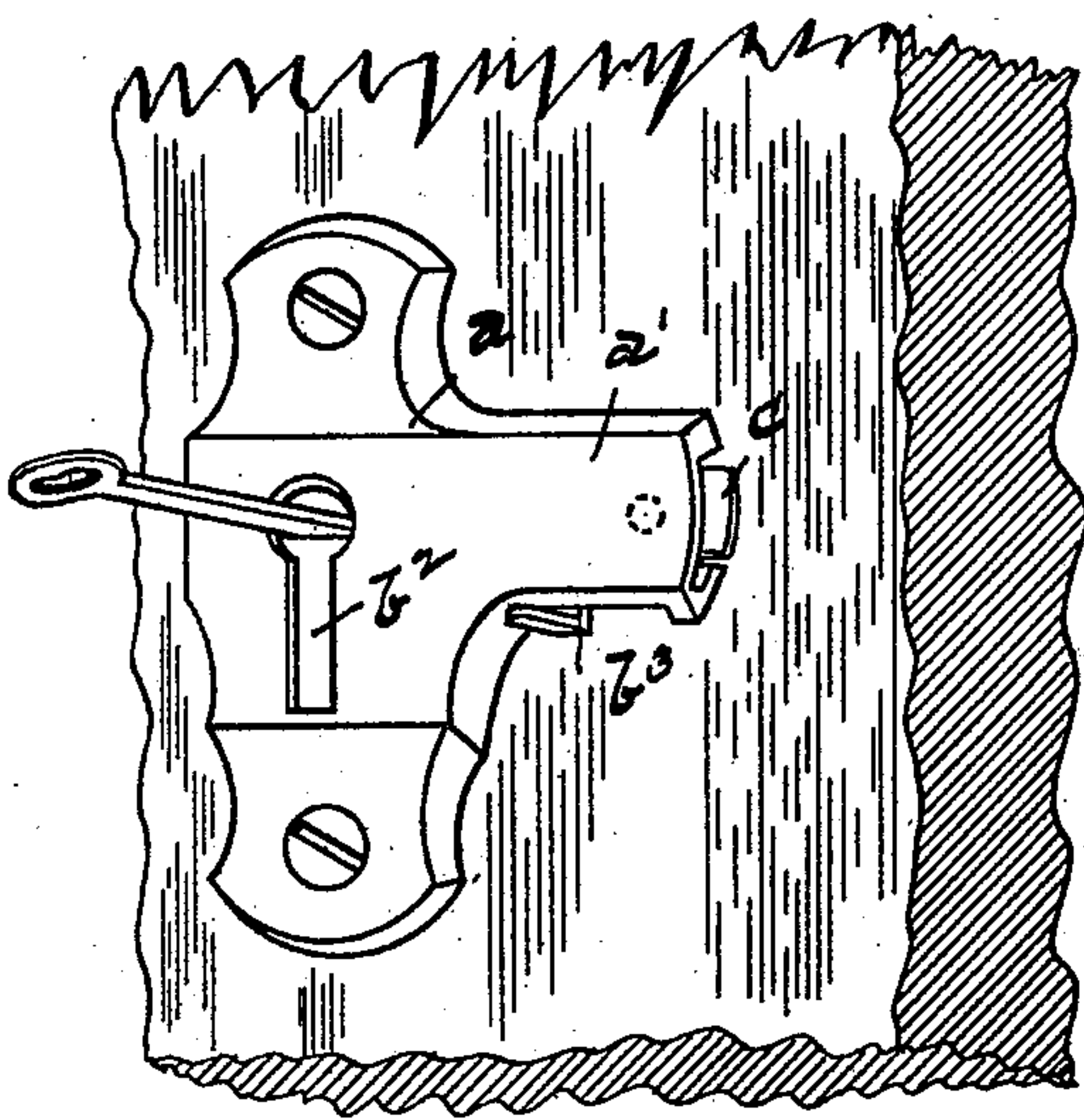


Fig-2-

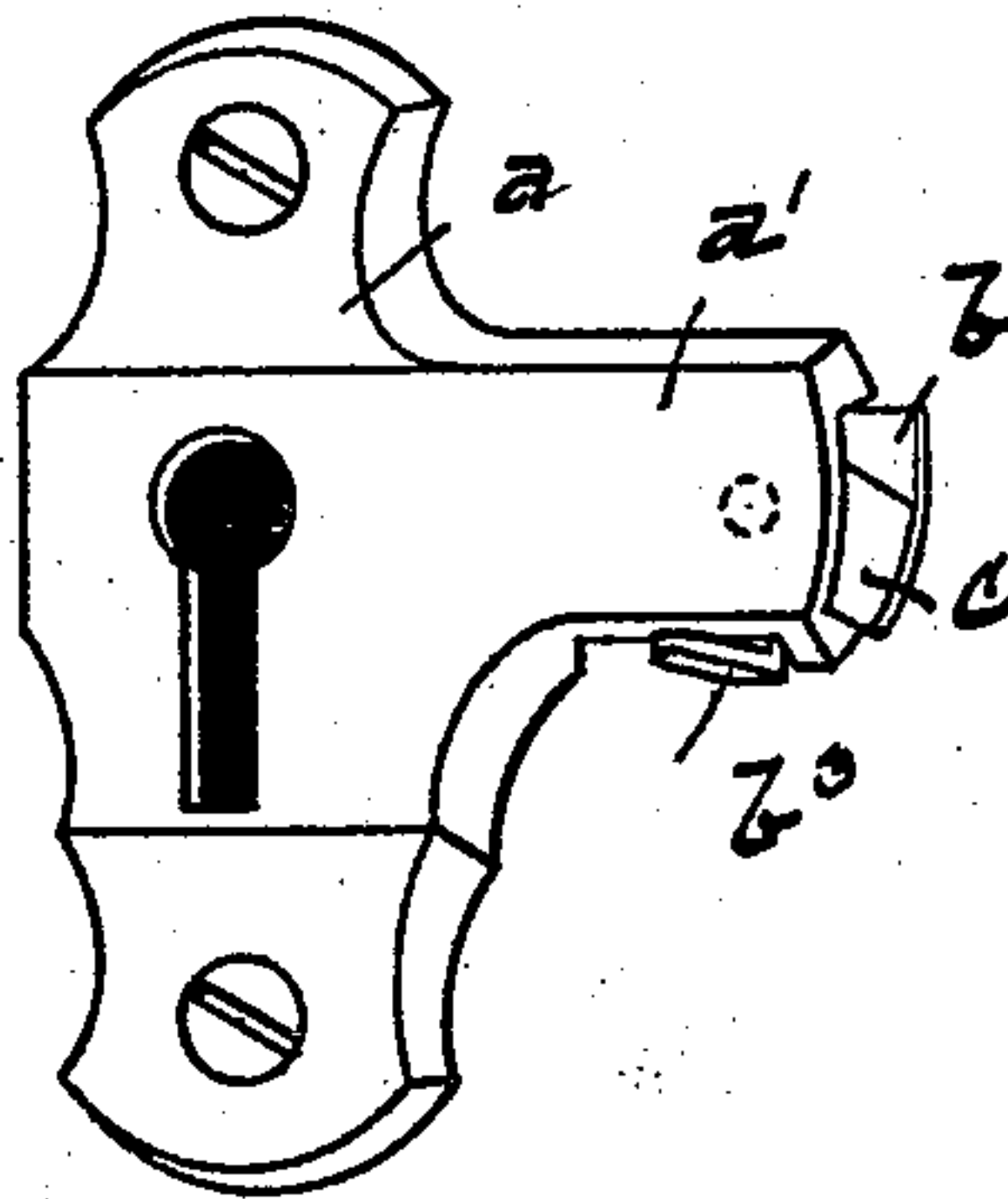


Fig-3-

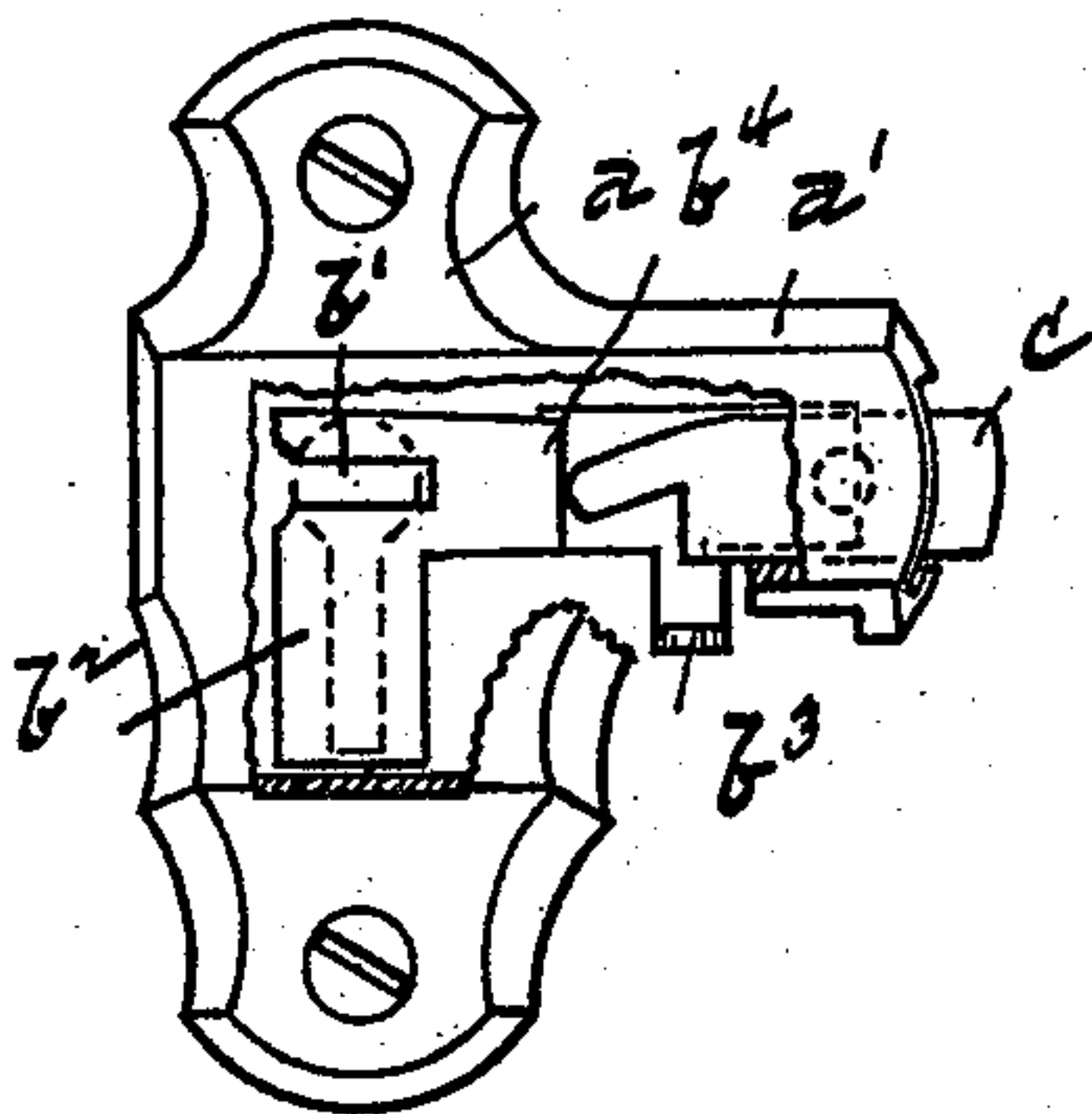
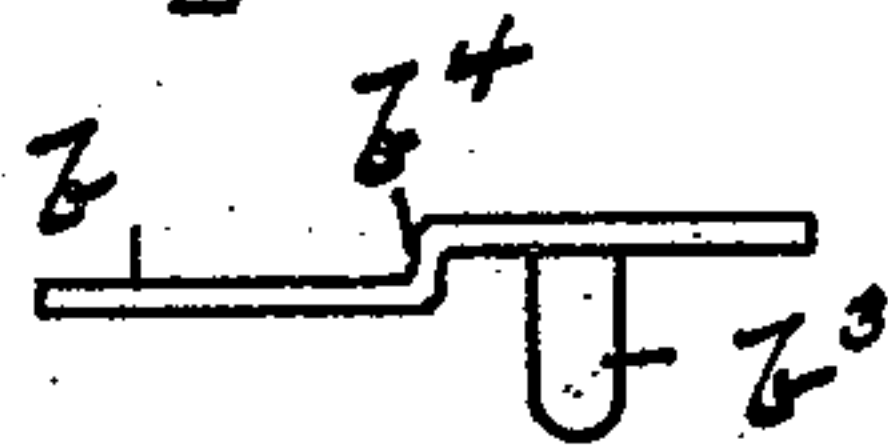


Fig-4-



WITNESSES:

Robert Ruddell.
J. E. Chapman

INVENTOR

Chas. M. Doyle
BY James Chapman
ATTORNEYS.

UNITED STATES PATENT OFFICE.

THOMAS W. DOYLE, OF HOLYOKE, MASSACHUSETTS.

KEY-FASTENER.

SPECIFICATION forming part of Letters Patent No. 494,555, dated April 4, 1893.

Application filed March 16, 1892. Serial No. 425,089. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. DOYLE, of Holyoke, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Key-Fasteners, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

My invention relates to devices for holding door-keys within their locks in such manner as to prevent their being manipulated from the opposite side of the door to unlock the latter, and it has for its object to provide a simple and inexpensive device of this nature, so constructed that the member thereof which engages the key can be positively locked in its operative position and can be released only from the inner side of the door.

To this end my invention consists in the key fastener constructed and operating as hereinafter fully described and particularly pointed out in the claim.

Referring to the drawings, in which like letters designate like parts in the several figures, Figure 1 is a view in perspective of a portion of a door provided with a key fastener embodying my invention. Fig. 2 is a similar view of the escutcheon and fastener, with the key removed and the parts of the fastener in their inoperative position. Fig. 3 represents the escutcheon as being partly broken away to show the parts composing the fastener, the latter being shown in its operative position. Fig. 4 is a plan view of the sliding plate which engages the key.

The letter *a* designates the escutcheon, which is adapted to cover the key-hole in the door in the usual manner, and which is provided with a lateral extension *a'*, recessed upon its rear side, to receive the parts composing the key fastener.

The fastener is composed of but two members, a sliding plate *b* which engages the key, and a locking dog *c*, which locks the plate *b* in its operative position. The plate *b* is suitably guided in the recessed portion of the escutcheon to enable it to have a free sliding movement in a horizontal plane, and is provided at its inner end with a horizontally disposed slot *b'* adapted to embrace the shank of the key, and with a downward extension *b²* adapted to close the lower portion of the key-

hole when the plate is in its operative position.

At a point substantially midway between its ends said plate is provided with the downwardly and outwardly projecting finger-piece *b³*, by which it can be conveniently moved from one of its positions to the other, said finger-piece projecting slightly beyond the outer face of the escutcheon, as shown in Figs. 1 and 2. The locking dog *c* is pivotally secured to the escutcheon near the outer end of the extension *a'* and within the recessed portion thereof, its outer end projecting slightly beyond the end of said extension to enable it to be conveniently manipulated as will be presently described. The inner end of said dog is weighted to cause it to be normally retained by gravity in its lowest position, its upper side, at said inner end, being suitably beveled as shown in Fig. 3, to enable it to rock upon its pivot without engaging the upper side of the recess in the escutcheon. Said dog is also, preferably, recessed at its inner end as shown, to form a shoulder at the lower side thereof, which serves to limit the movement of the plate *b* in an outward direction. The plate *b* is provided with a lateral projection with which the inner end of said dog engages to lock the former in its operative position, and as herein shown said projection consists of a vertically disposed shoulder *b⁴* formed in the plate, as shown more clearly in Fig. 4.

The key being turned to a position to lock the door, stands with its shank in a horizontal position, that is to say, its flattened sides will be parallel with the walls of the slot *b'* in plate *b*. Said plate *b* is then moved by means of its finger-piece *b³* toward the key-hole, thereby causing its slot *b'* to embrace the shank of the key and its downward extension *b²* to cover the lower portion of the key-hole, as shown in Fig. 1. As soon as said plate is moved to this position the inner end of dog *c* drops by gravity to the position shown in Fig. 3, and, by abutting against the shoulder *b⁴*, positively locks the plate against movement. The key is now held in such manner that it cannot be manipulated from the outer side of the door to unlock the latter, and the key-hole is entirely closed. To release the key the finger is applied to the projecting end of dog *c* and the latter is pressed downwardly, thereby raising its inner end and disengaging it from the

shoulder on plate *b*, whereupon said plate can be moved to its outermost position by pressing the thumb against the finger-piece *b*³, the parts then occupying the position shown in Fig. 2. As the plate *b* is thus moved outwardly its shoulder *b*³ enters the recess at the inner end of the dog *c* and retains the latter in its elevated position, whence it is ready to drop to the position shown in Fig. 3 when said plate is again moved inwardly. It will thus be seen that the key fastener devised by me can be operated with one hand, and entirely by the sense of touch. By causing the plate *b* to move in a horizontal plane to engage the key as described, I avoid the necessity for exercising any care in the manipulation of the key to cause it to enter the slot *b*¹, inasmuch as the act of locking the door leaves the key in the desired position, with its flattened sides parallel with the sides of said slot. By beveling the plate *b* at the entrance to said slot, moreover, as shown in Fig. 3, said plate will itself correct any slight deviation of the shank of the key from said true position when moved into engagement with the same.

By providing means for positively locking the plate *b* in its operative position I render it impossible to manipulate said plate from the outer side of the door, by the insertion of suitable tools within the key-hole, and thereby

release the key, as is true of all fasteners in which the key-engaging device is held in engagement with the key by the action of a spring. I therefore provide an absolute safeguard against the release of the key from the outer side of the door.

If desired a spring to throw the plate *b* outwardly, when released by raising the dog, can be employed, but I prefer to avoid the use of springs entirely and thereby provide a fastener which will be sure and positive in its action at all times.

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

In a key fastener, the combination with the escutcheon *a a'*, of the sliding plate *b* provided with slot *b*¹, downward extension *b*² shoulder *b*⁴, and finger-piece *b*³, of the dog *c* pivotally secured to the escutcheon in position to engage said shoulder on said plate and lock the latter in engagement with the key, said dog having the inner end thereof weighted substantially as described and having the outer end thereof projecting beyond the edge of the escutcheon, substantially as set forth.

THOMAS W. DOYLE.

Witnesses:

W. H. CHAPMAN,
J. E. CHAPMAN.