

No. 766,148.

PATENTED JULY 26, 1904.

A. T. KINGSLEY.
HASP LOCK.

APPLICATION FILED MAY 25, 1904.

NO MODEL.

Fig. 1.

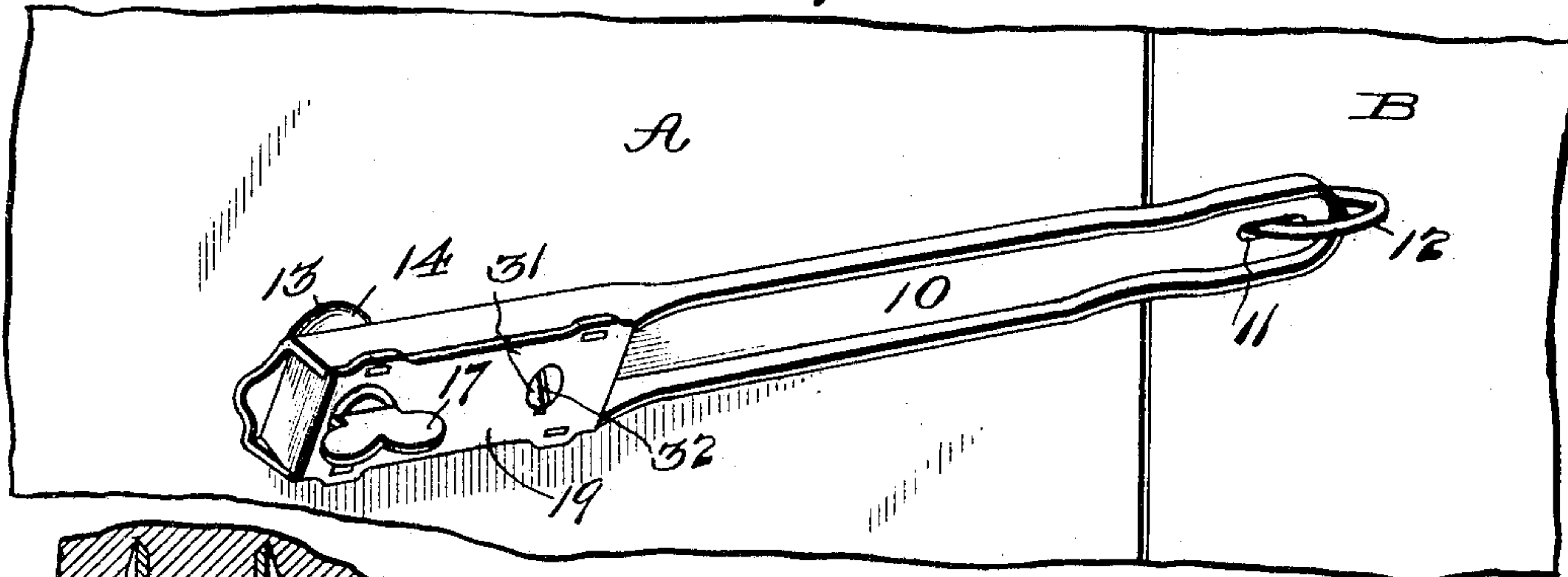


Fig. 2.

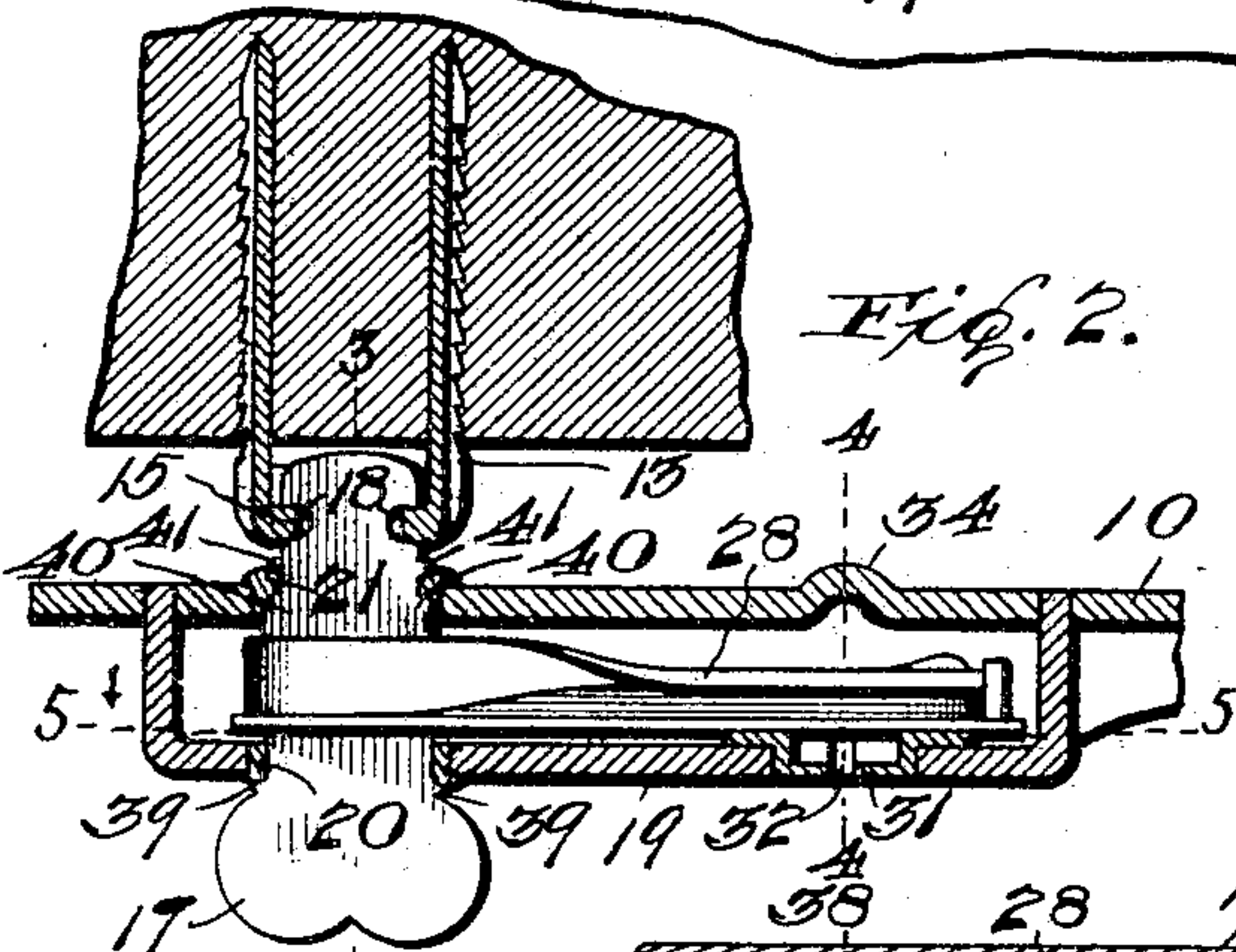


Fig. 3.

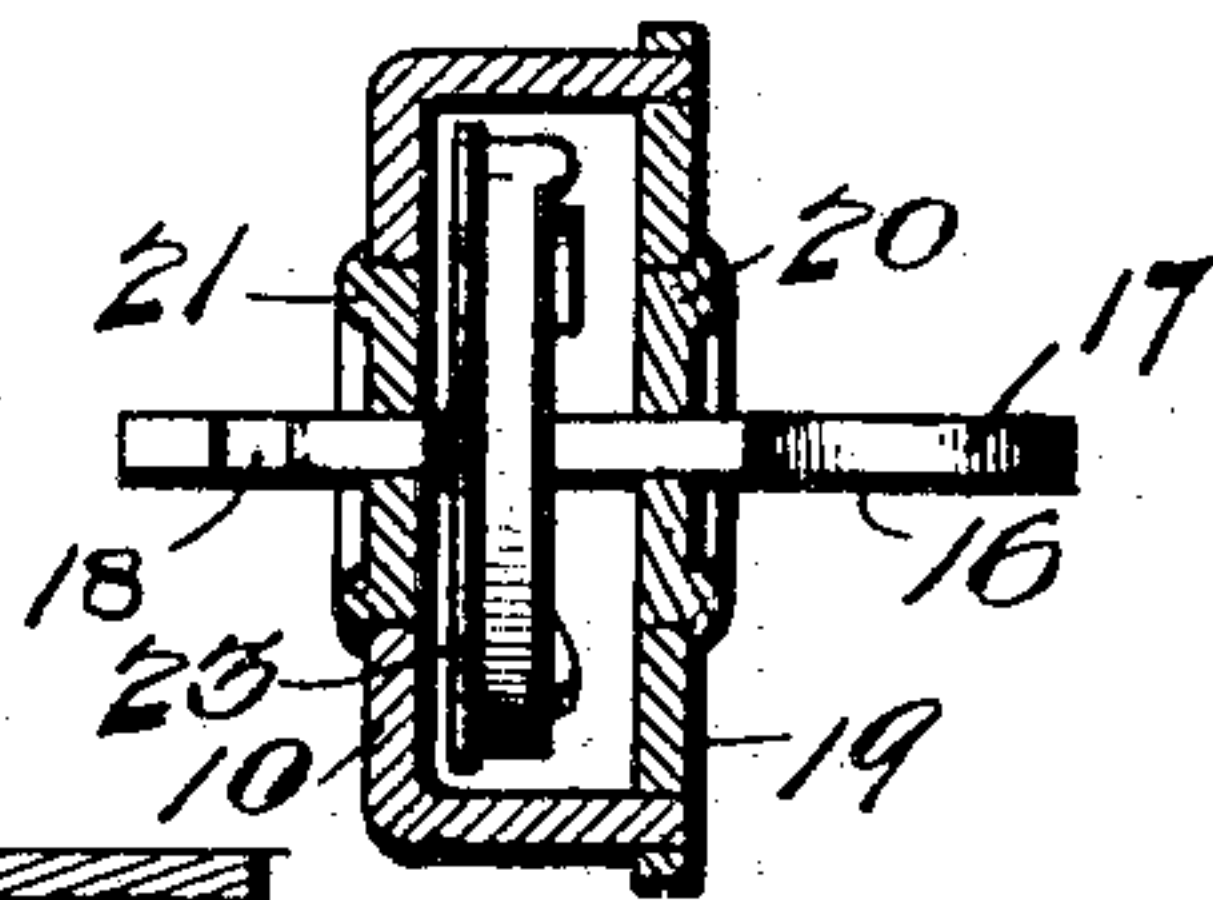


Fig. 4.

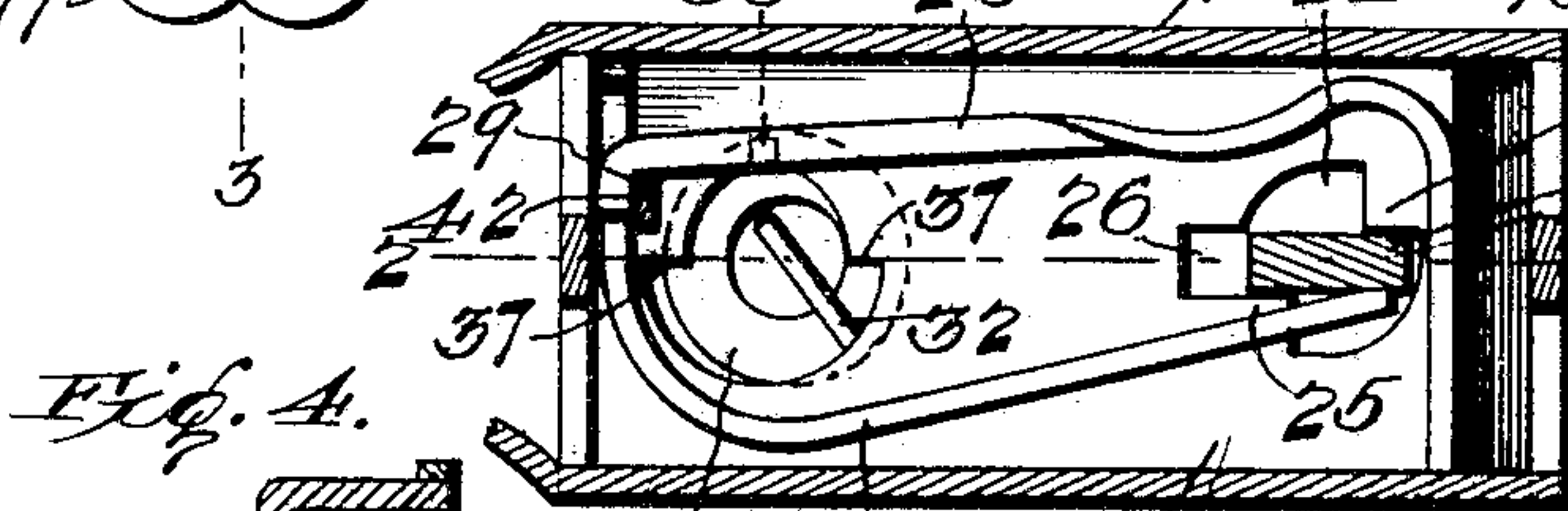


Fig. 5.

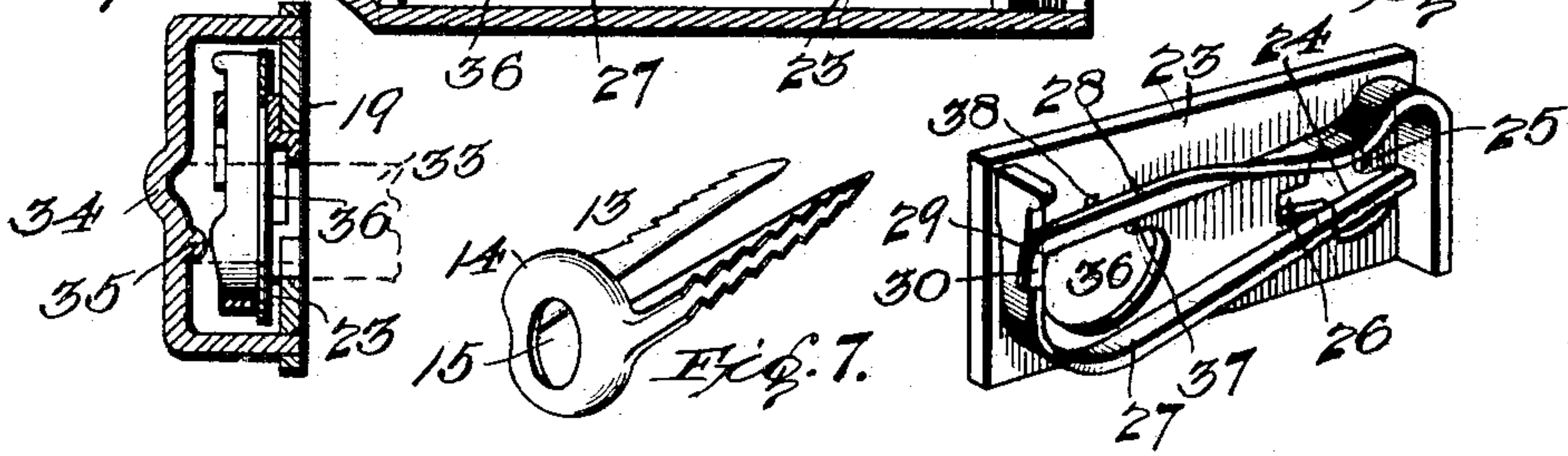


Fig. 6.

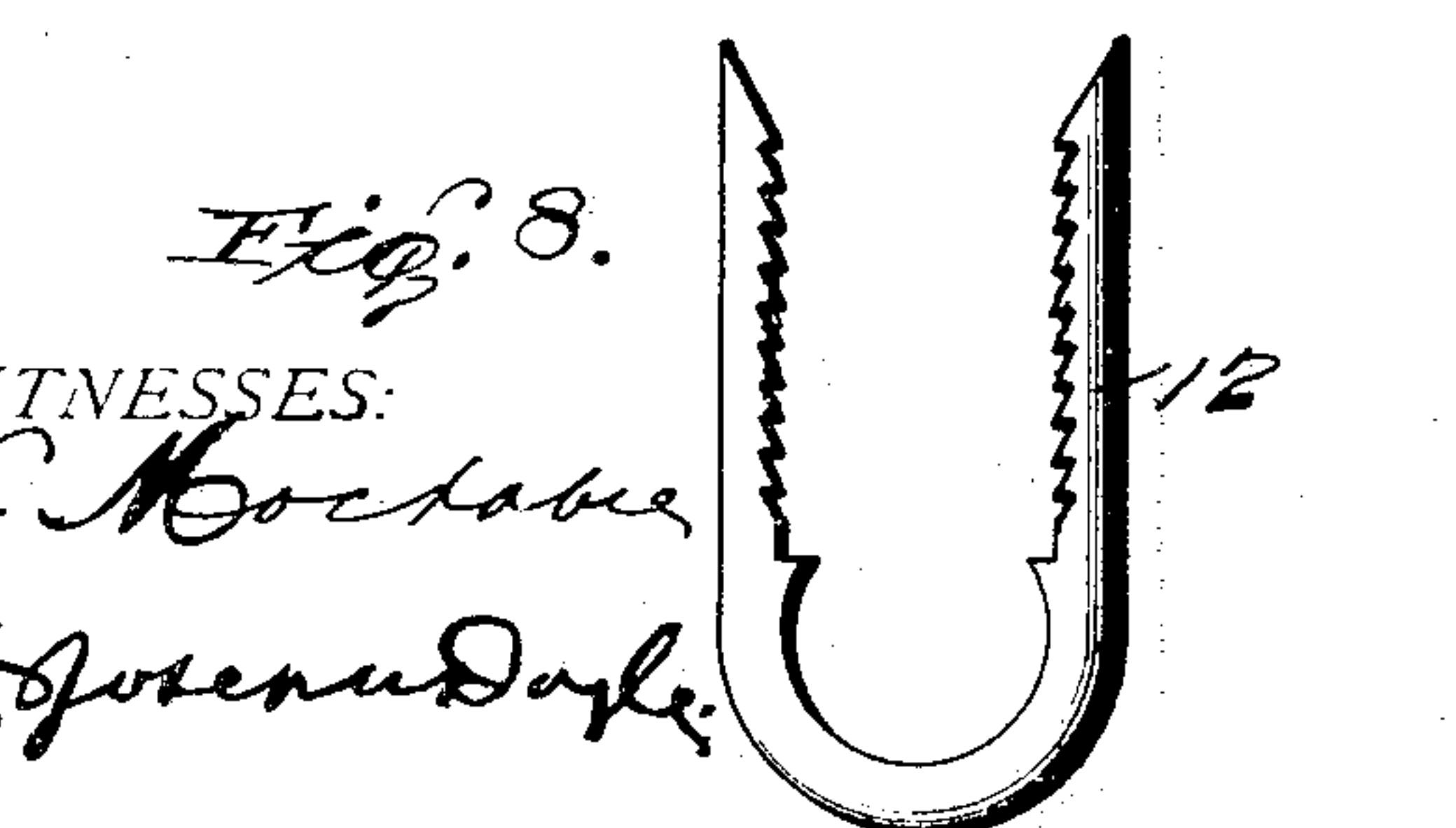


Fig. 7.



Fig. 8.

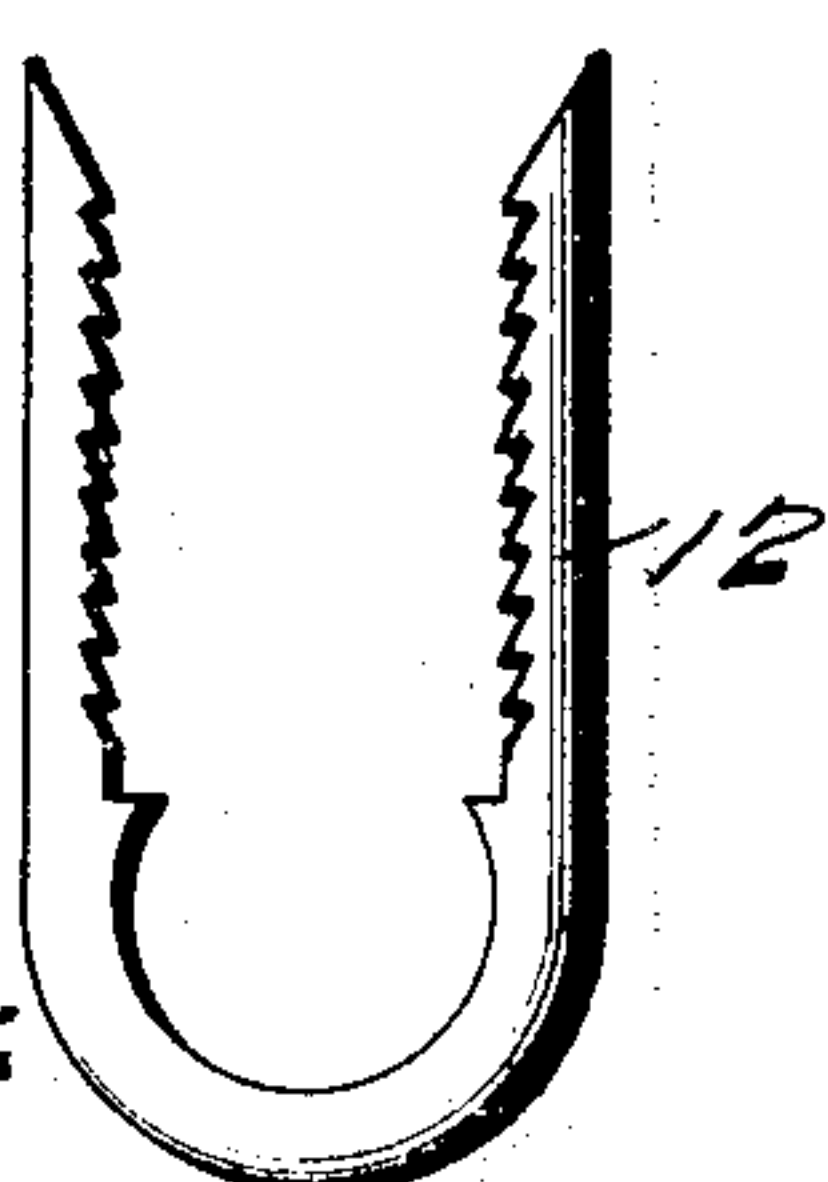


Fig. 9.



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UNITED STATES PATENT OFFICE.

ALBA T. KINGSLEY, OF MERIDEN, CONNECTICUT.

HASP-LOCK.

SPECIFICATION forming part of Letters Patent No. 766,148, dated July 26, 1904.

Application filed May 25, 1904. Serial No. 209,755. (No model.)

To all whom it may concern:

Be it known that I, ALBA T. KINGSLEY, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented new and useful Improvements in Hasp-Locks, of which the following is a specification.

This invention relates to locks, and particularly to that type known as "hasp-locks." It is to be understood, however, that my invention is not limited to the uses to which hasp-locks are usually applied, but may be utilized as to some of its features for locking parts which have relative movements other than the usual sliding ones, and it is also to be understood that the invention in its embodiment as a hasp-lock may be employed in connection with a door which slides either to the right or left of its jamb or casing or a vertically-sliding door, or it may be employed to connect two sliding or swinging doors.

One of the objects of my present invention is to provide a device of this character in which three sides of the lock-casing are formed by integral portions of the hasp, the other three sides of said casing being formed by another strip of metal.

Another object of the invention is to provide a lock for the purpose described employing but two springs in its construction.

A further object of the invention is to provide a hasp-lock which requires no screws for securing it in place.

To these ends the invention consists in the construction and combination of parts substantially as hereinafter described and claimed.

Of the accompanying drawings, Figure 1 represents a perspective view of the device complete in one of the forms in which it may be embodied. Fig. 2 represents a longitudinal section through the lock and keeper and one end of the hasp, the line of section being indicated in Fig. 5. Fig. 3 represents a section on line 3 3 of Fig. 2. Fig. 4 represents a section on line 4 4 of Fig. 2. Fig. 5 represents a section on line 5 5 of Fig. 2. Fig. 6 represents a detail perspective of the locking-plate and its spring and tumbler. Fig. 7 represents a perspective view of the keeper. Figs. 8 and 9 are respectively a side elevation

and an edge view of the staple which permanently supports or attaches one end of the hasp.

Similar reference characters indicate the same or similar parts throughout the several views.

The main plate or body of the hasp is indicated at 10, said plate having a slot 11 in one end through which the staple 12 passes, said staple being secured to one of the parts which are to be connected by the hasp. As shown in Figs. 8 and 9, the said staple is formed from a single strip of sheet metal bent longitudinally to form two thicknesses of metal and bent to a substantially U form, the legs of the staple being pointed and the inner edges thereof being serrated. This structure forms a practical staple of sheet metal having ample strength and adapted to be driven into the part to which the hasp is to be connected, the serrations of the legs of the staple preventing it from being readily pulled out.

In Fig. 1 one of the parts to be connected by the hasp is represented at A and the other part at B. Said two parts may be presumed to be a sliding door and the casing therefor or the jamb.

The keeper or socket member 13 is formed of sheet metal, having its legs concavo-convex in cross-section, the edges being serrated. The portion of the keeper connecting said legs is formed as a somewhat cup-shaped head or boss 14 to form a raised central portion, said raised portion being provided with a central elongated slot 15.

As clearly indicated in Fig. 1, the hasp 10 is formed of a strip of sheet metal having its edges bent upwardly, the said edges at the lock end of the hasp having a sufficient width to form two sides of the lock-casing, the bottom of said casing being formed by the portion of the hasp which connects the said edges. The ends of the face-plate 19 of the lock-casing are bent downward between the edges of the hasp, so that the said plate formed of one strip of metal coacts with the hasp to form the complete lock-casing. These two parts are interlocked by suitable lugs passed through slots and preferably headed down in a manner that will be readily understood.

Mounted in bearings at the free end of the hasp-plate is a rotary stud or catch 16, having a thumb-piece or head 17 at its outer end and having its sides near its inner end formed with notches 18, so as to form a head at the inner end adapted to enter the boss 14 of the keeper and to be retained therein when the stud or catch is given a quarter-turn after its inner end has entered said boss. It will be apparent, therefore, that the rotary stud or catch 16 forms practically a turn-button adapted to cooperate with the socket or keeper to retain the hasp in the position indicated in Fig. 1.

Fitted to circular openings in the face-plate 19 and the plate 10 are disks 20 and 21, respectively, said disks being formed with flanges slightly overlying the outer surfaces of said two plates. These disks are formed with slots through which the flat stud 16 extends, and they form bearings which support said stud, so that it may be rotated within the limits of the stops hereinafter described.

Mounted within the casing so that it may be slid or moved slightly longitudinally thereof is the locking-plate 23, having an opening 24, through which the rotary stud or catch 16 extends. Said opening is not circular, however, there being two substantially diametrically opposite projections 25, each of which has two edges at a right angle to each other to form shoulders or stops to limit the rotary movements of the stud 16 to a quarter-turn in either direction. A recess 26 communicates with one side of the opening 24, the edges of said recess being adapted to receive between them one edge of the intermediate portion of the stud 16 when the locking-plate is moved longitudinally, as hereinafter described, to thereby prevent the stud 16 from being turned. Said recess 26 is so formed or positioned relatively to the position in which the keeper 13 is secured that when the edges of the recess embrace the edge of the stud 16 the sides of the slot 15 of the keeper will be engaged in the notches 18 of the stud and prevent the stud (and consequently the hasp) from being removed from the keeper.

As shown in Figs. 5 and 6, a spring 27 is secured to one end of the plate 23 and is bent so that its free end crosses the opening 24 and is adapted to bear either upon a flat side of the intermediate portion of the stud 16 or upon one edge thereof, according to the position to which the stud has been rotated. Said spring yieldingly holds the stud in the position which it occupies when its notches 18 are engaged with the sides of the slot 15 of the keeper, and it frictionally holds the stud when the latter is turned at a right angle to that position. When the stud is partly turned from the position in which the spring bears on its edge, the said spring immediately actuates the stud in a snapping manner to throw it to the locking position

and hold it there. At the other end of the plate 23 is secured one end of a resilient tumbler 28, having a lug 30 at its free end. The plate 10 is formed with a lug 42 adjacent to the end of the tumbler to cooperate with the lug 30, as will be presently described.

Mounted in a circular opening in the face-plate 19 is a disk 31, having a slot or key-hole 32 to receive the key 33. (Indicated by dotted lines in Fig. 4.) Opposite said key-hole 32 the plate 10 is formed with a boss 34 to provide a recess on the inner face of said plate 10 to receive the tip or end of the key and hold the key in proper working position. Adjacent to the boss 34 the plate 10 is formed with a lug or inwardly-extending projection 35 to fit a corresponding notch in the end of the key. In different locks the position of this lug 35 relatively to the boss 34 may be changed, the key being correspondingly formed.

The locking-plate 23 is formed with an opening 36 to permit of the passage of the key, and the sides of said opening are formed with stop-shoulders 37 to limit the rotary movements of the key in a well-known manner. A recess 38 communicates with the opening 36, said recess receiving the edge of the key.

The rotary stud 16 is formed with shoulders 39, which bear upon the outer side of the flange of the front disk 20, and with lugs 40, which bear on the inner side of the rear disk 21. The lugs 40 project only such distance as to enable them to pass through the slot of the disk 20 when the parts are being assembled. After the stud 16 has been inserted to its proper position burs 41 are struck up from the edges of the stud and riveted against the outer side of the rear disk 21.

It will be apparent that as long as the locking-plate 23 is left in an unlocked position, so that its recess 26 does not engage the rotary stud or catch, the latter may be readily operated as a turn-button to engage with the keeper and to be released therefrom; but when the stud is in engagement with the keeper and the proper key is inserted and turned the edge of the key first lifts the tumbler 28 and the lug 30 to a point where the lug 30 will be above the plane of the fixed lug 42, and then the key engages the recess 38 of the plate 23 and slides the locking-plate along, so that the recess 26 of the latter locks the stud. At the end of this movement of the locking-plate the lug 30 of the tumbler 28 drops in front of the lug 42 and prevents the locking-plate from being retracted excepting by the key. Upon reverse movement of the key the tumbler 28 is first raised, so that as the key carries the tumbler and plate backward the lug 30 of the tumbler rides over the lug 42 and drops behind it.

It will now be understood that I have provided an extremely simple lock, one that is not liable to get out of order, and one which can

be produced at an extremely low cost owing to the fact that the parts can all be struck out of sheet metal by dies.

I claim—

5 1. A hasp-lock comprising a socket member or keeper having a raised front portion provided with an elongated slot and having integral attaching prongs or legs, and a hasp member having a rotary stud provided with shoulders to engage said keeper.

10 2. A hasp-lock comprising a socket member or keeper formed of sheet metal having a raised and slotted front portion and integral serrated prongs or legs, and a hasp member
15 having a rotary stud provided with shoulders to engage said keeper.

20 3. A hasp-lock comprising a sheet-metal hasp having its edges turned upwardly whereby three sides of the lock-casing are formed, a metal strip forming the face-plate of the lock-casing, the ends of said strip being bent

to form the ends of said casing, and lock mechanism contained in said casing.

4. A lock comprising a casing, a rotary stud or catch mounted therein, and a lock- 25 plate longitudinally movable in said casing and having shoulders 25 and a recess 26, a spring 27 secured to the plate at one end and adapted to bear at its free end against said stud, and a second spring secured to said plate 30 and adapted to be operated by a key, the last-mentioned spring having a lug at its end, and a fixed lug in the casing adapted to be engaged by the lug of said spring.

In testimony whereof I have signed my name 35 to this specification in the presence of two subscribing witnesses.

ALBA T. KINGSLEY.

Witnesses:

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FLORA A. ANDRUS.