

No. 765,289.

PATENTED JULY 19, 1904.

A. T. KINGSLEY.

HASP LOCK.

APPLICATION FILED OCT. 10, 1903.

NO MODEL.

Fig. 1.

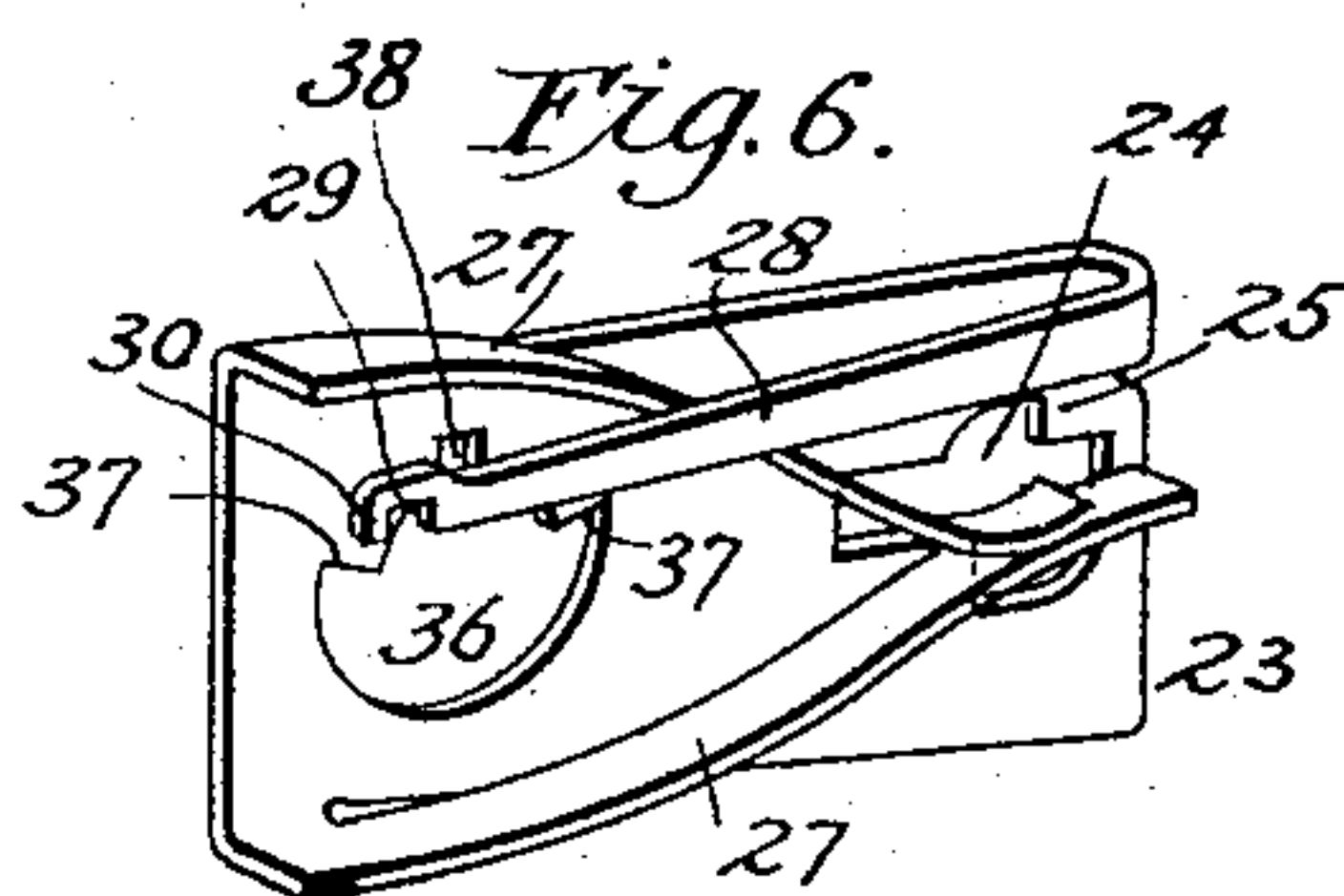
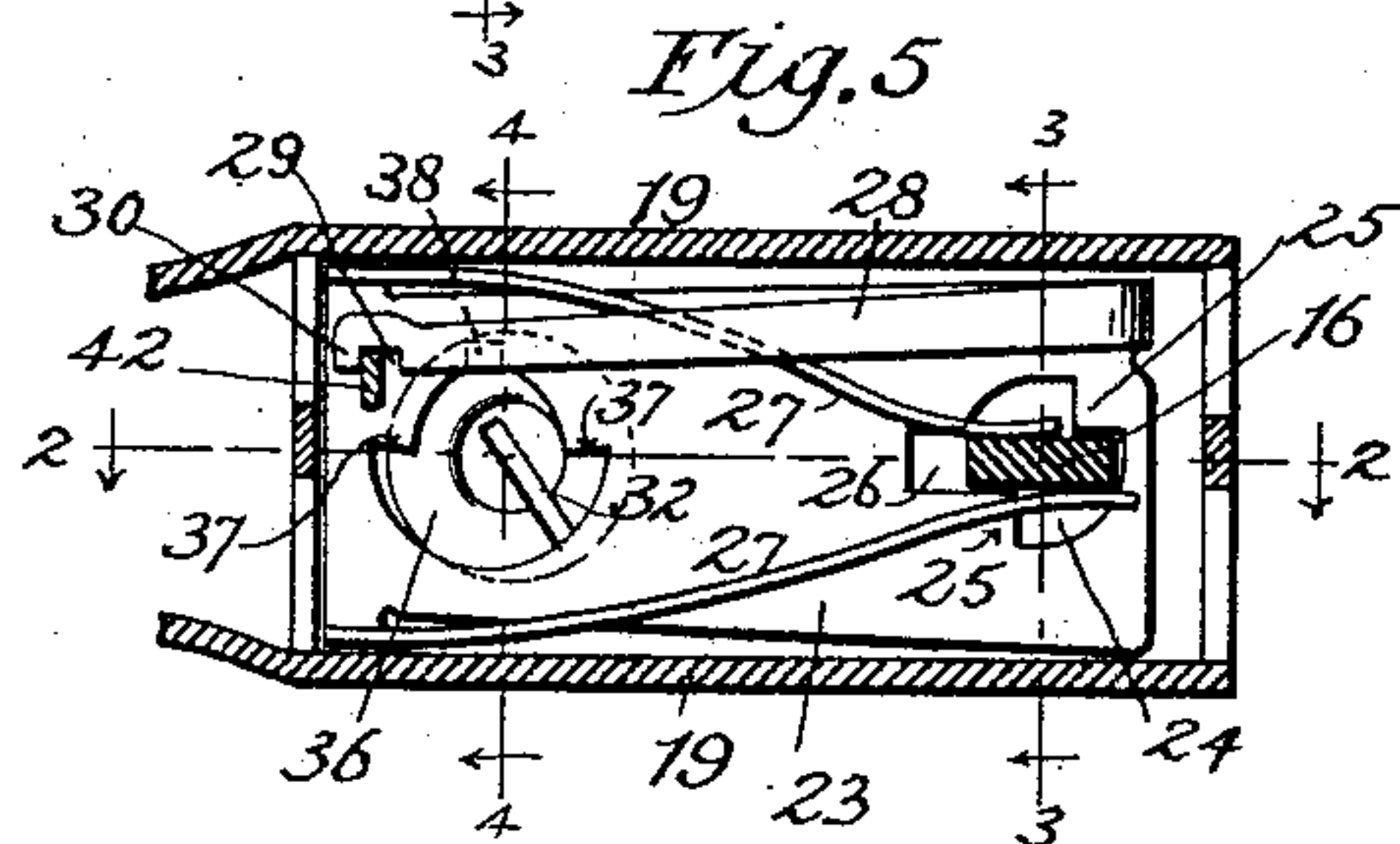
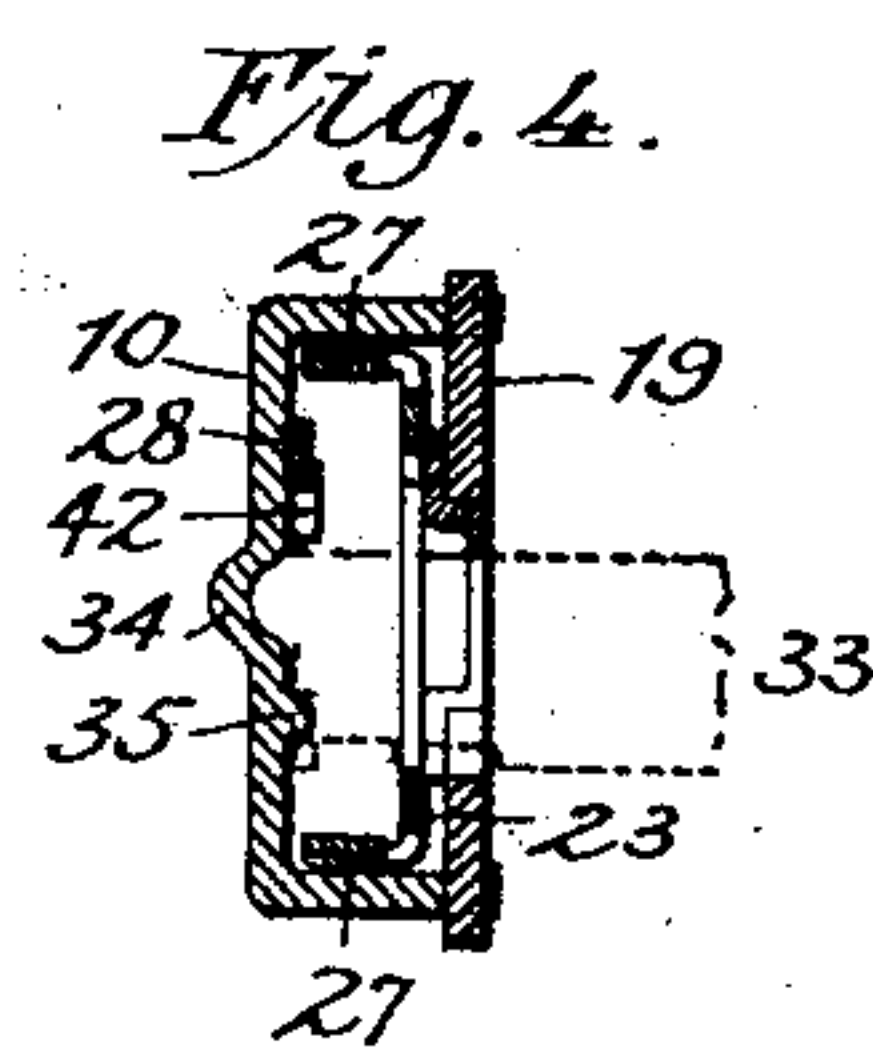
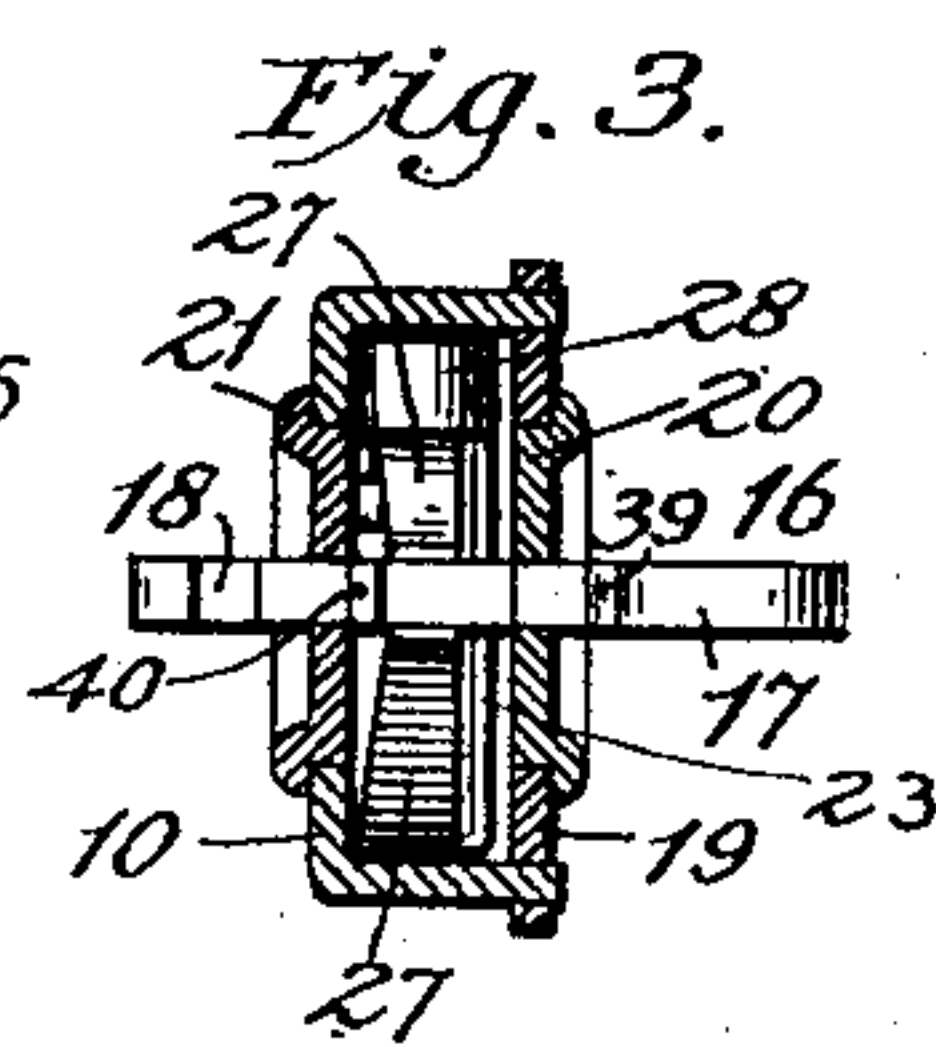
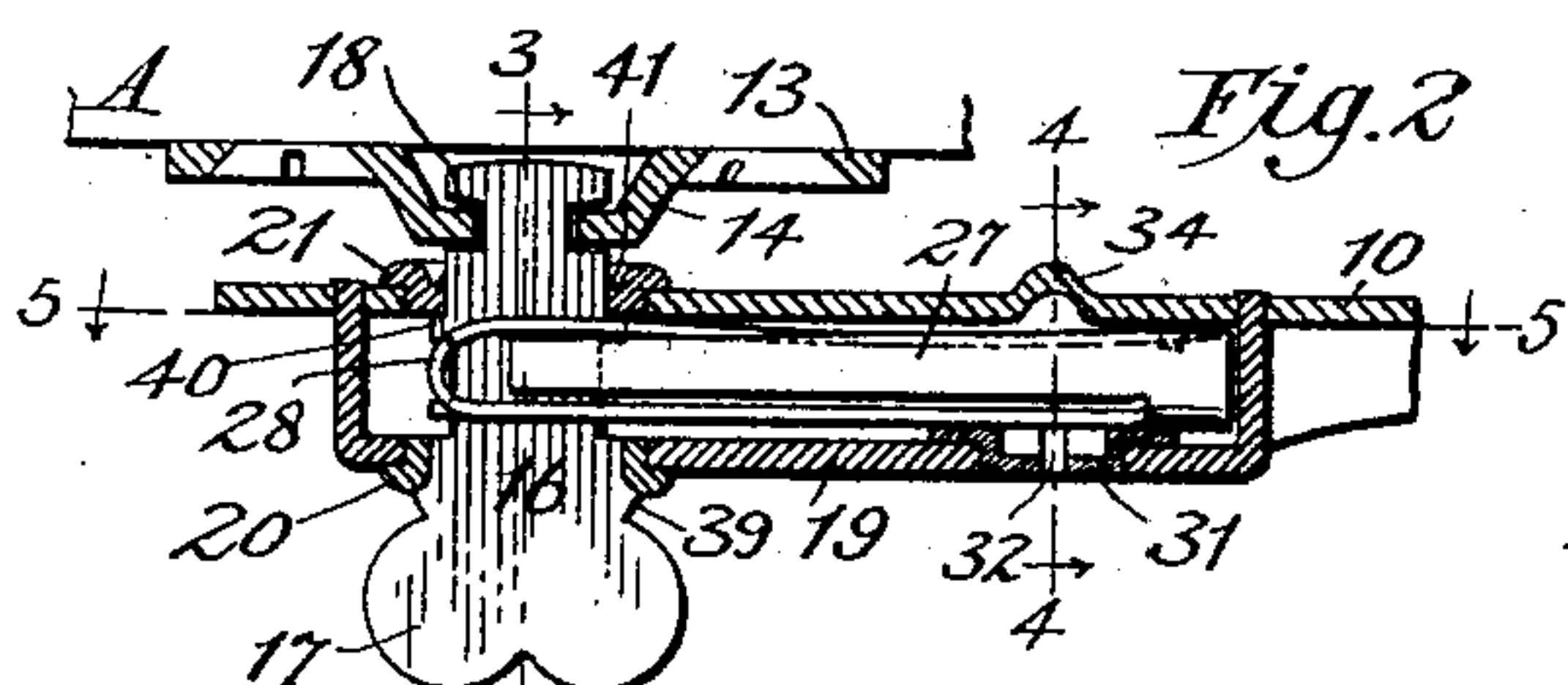
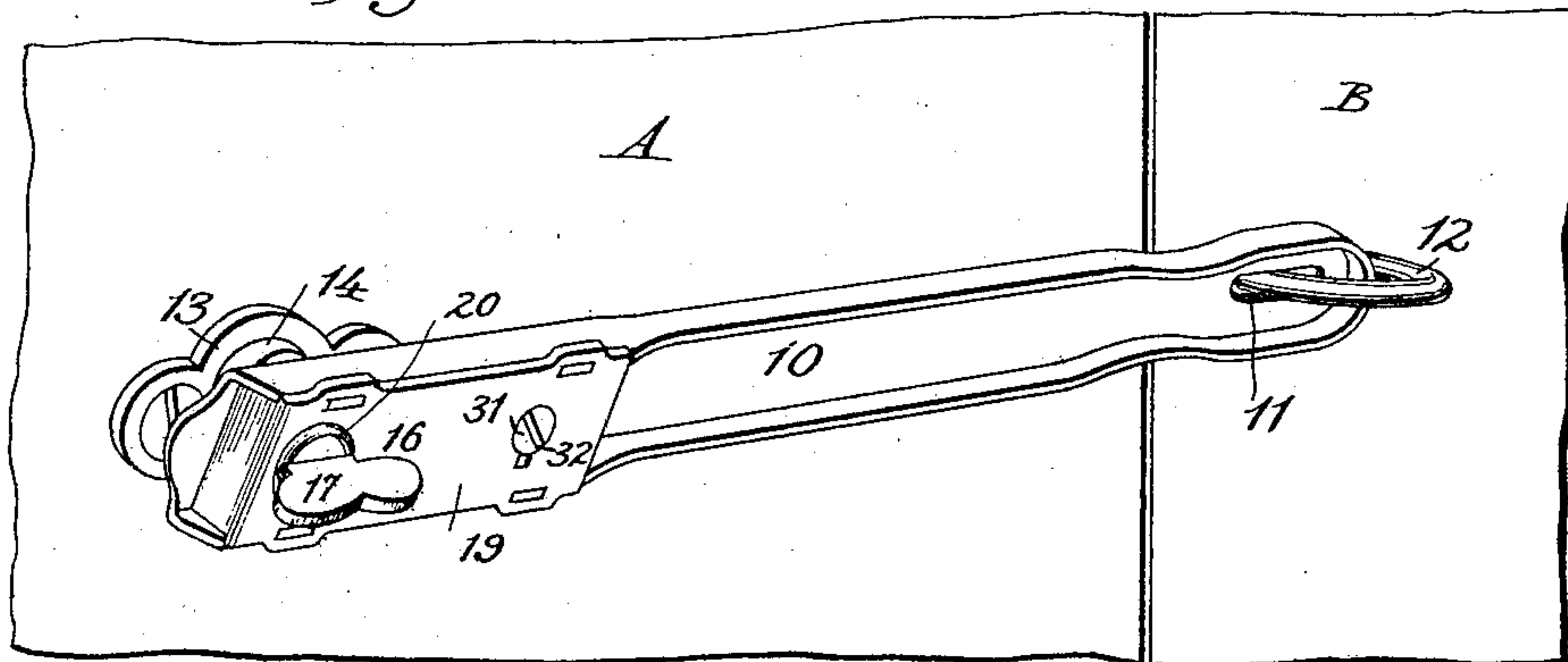


Fig. 7.

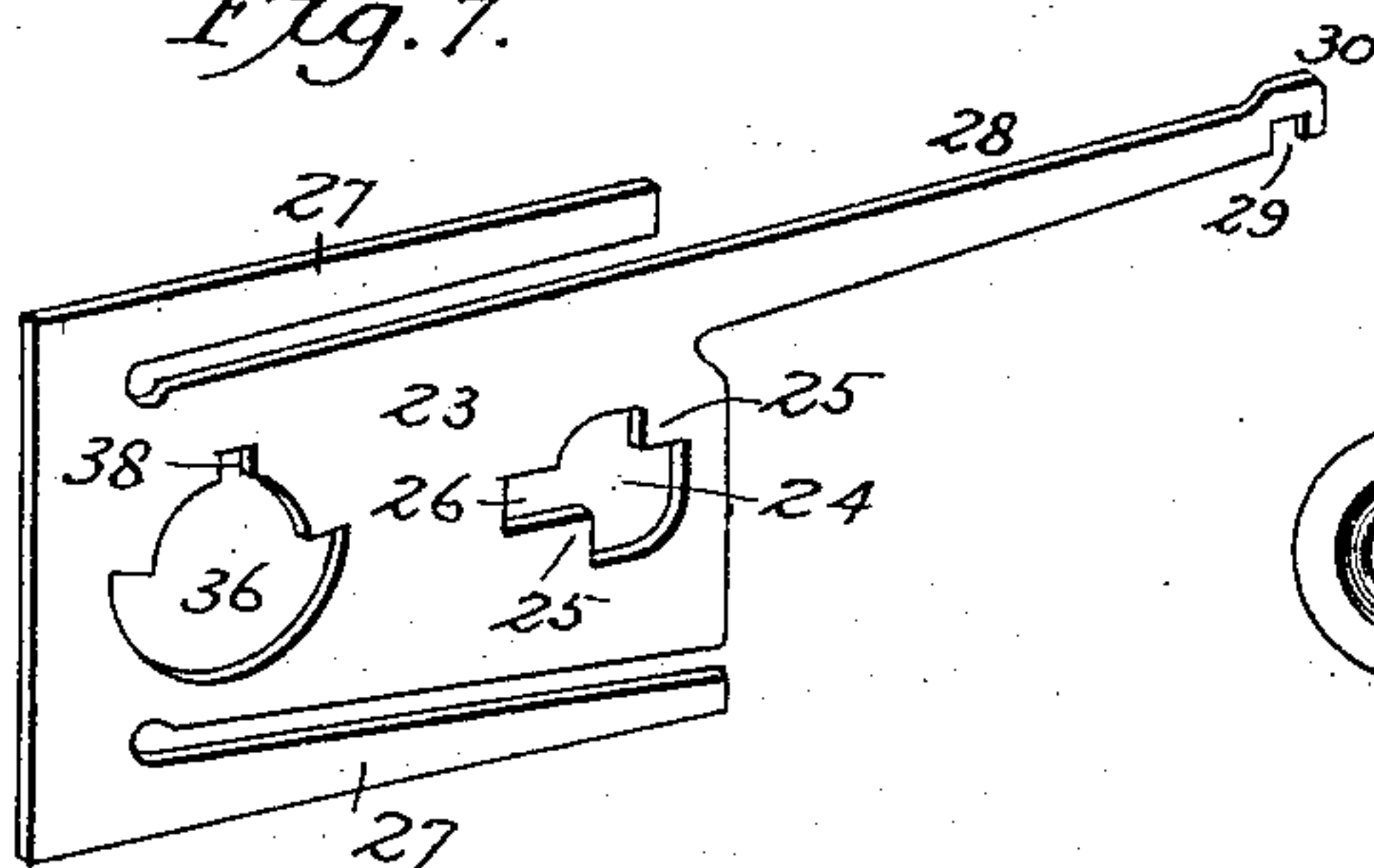
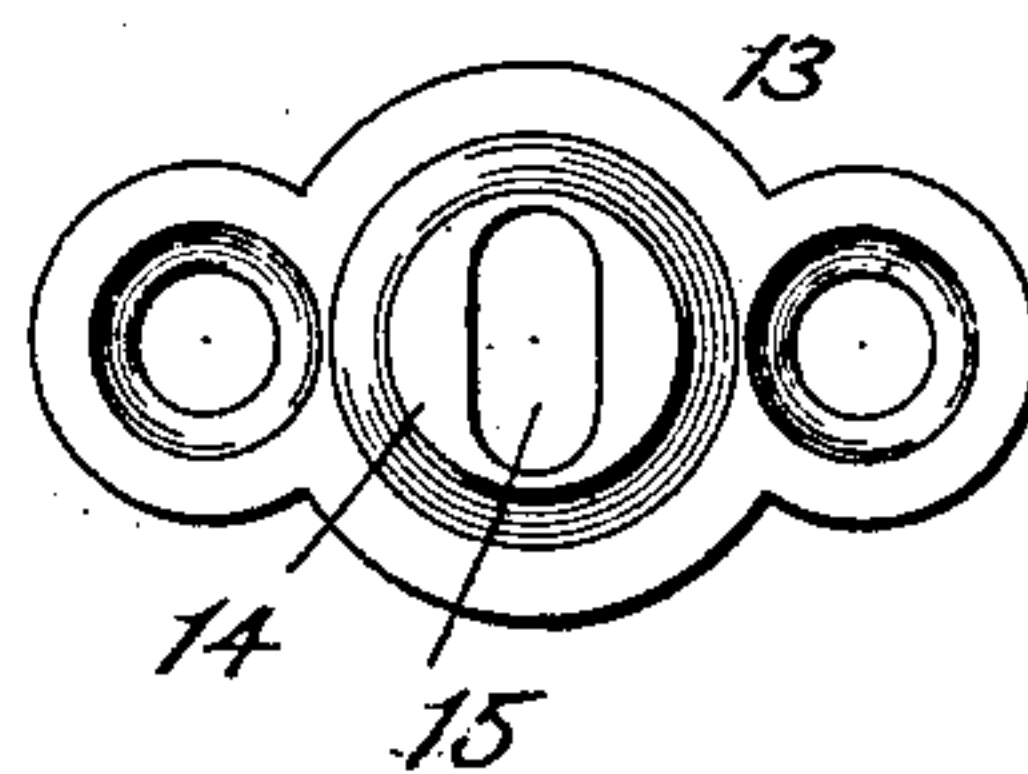


Fig. 8.



Witnesses

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HASP-LOCK.

SPECIFICATION forming part of Letters Patent No. 765,289, dated July 19, 1904.

Application filed October 10, 1903. Serial No. 176,554. (No model.)

To all whom it may concern:

Be it known that I, ALBA T. KINGSLEY, of Wallingford, in the county of New Haven and State of Connecticut, have invented new and useful Improvements in Hasps and Locks; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to locks, and particularly to that type of such fasteners 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 from 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 the invention is to provide a hasp-lock which will normally so rest that its outer face will be presented in an inclined direction, so that rain or snow cannot readily find its way into the keyhole.

Another object of the invention is to provide a lock of the character described which will not require the cutting away of any woodwork in order to place the parts in position, an ordinary screw-driver being the only tool required.

Another object of the invention is to provide a lock of the character described employing a turn-button for securing the door for ordinary purposes, means being provided for locking such turn-button to prevent it from being released from its keeper.

A further object of the invention is to provide a simple and economically-constructed locking device, the parts of which may be produced entirely by diework and requiring no rivets or screws for connecting them.

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 integral springs and tumbler. Fig. 7 represents a perspective of the parts shown in Fig. 6 while said parts are in the form in which they are cut from a sheet of metal and before being bent to the positions shown in Fig. 6. Fig. 8 represents a face view or front elevation of the keeper or socket member.

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. In Fig. 1 one of said parts 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 staple 12 is suitably secured to one of said parts or members, the keeper or socket member 13 being suitably secured to the other part, as by screws. The keeper 13 is formed with a raised central portion or boss 14, having an elongated slot 15.

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. It will also be understood that the hasp when in such position is somewhat loosely supported at each end, so that its outer face will be normally presented in an inclined direction, so that rain or snow will not readily lodge upon said face.

The front of the casing at the outer or free portion of the hasp comprises a face-plate 19, which is suitably connected to the outwardly-turned edges of the hasp-plate, the ends of the face-plate being turned downward between the upturned edges of the hasp-plate, these two parts being interlocked by suitable lugs passed through slots and headed down in a manner more or less common in the manufacture of lock-casings.

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. By comparing Figs. 6 and 7 it will be seen that the plate 23 is so died out from a blank of sheet metal as to form portions which are bent and adapted to perform certain independent functions presently described, although said portions are integral with the plate. The edge portions on two sides are bent up at right angles and are of a width to approximately fit the space between the plates 19 and 10 of the casing—that is, the bent-up portions are of this width at the end of the plate where the bend occurs. The free ends of these bent-up portions are bent toward each other and form

springs the tips of which bear either upon the flat sides of the intermediate portion of the stud 16 or the edges thereof, according to the position to which the stud has been rotated. They yieldingly hold 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 they frictionally hold 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 springs bear on its edges, the said springs immediately actuate the stud in a snapping manner to throw it to the locking position and hold it there. It is to be understood that one of the springs 27 might be omitted; but I prefer to employ both, so as to equalize lateral pressure on the stud. The other bent-up portion of the plate 23 forms a resilient tumbler 28, said tumbler at its free end being formed with a notch or recess 29, adjacent to which or forming one end of which is a lug 30. 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 the 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 be now 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, and the further fact that there is entirely within the casing only one piece of metal.

I do not claim herein the specific structure of the main plate or body of the hasp, as the same is included in the subject-matter of my application filed May 25, 1904, Serial No. 209,755.

Having now described my invention, although without attempting to describe all of the forms in which it may be embodied or all of the modes of its use, what I claim is—

1. A hasp-lock comprising a socket member or keeper having a raised front portion provided with an elongated slot and having its base portion by which it is attached flat at the rear whereby it may be attached to a supporting-surface without cutting the latter, and a hasp member comprising a plate slotted at one end and having a rotary stud projecting rearwardly from its other end said stud being formed with shoulders to engage the slotted keeper, the said hasp member being provided with a lock for preventing rotation of said stud.

2. A lock comprising a socket member or keeper, and a lock-carrying plate having a rotary stud for entering said keeper and a locking-plate laterally movable relatively thereto, said locking-plate having an opening through which said stud extends.

3. The combination with a keeper, of a hasp having a slot at one end adapted to loosely engage a staple, and a rearwardly-projecting catch having shoulders to engage the keeper

said shoulders being located at a distance behind the rear surface of the hasp, the construction being such that the hasp will be supported loosely at each end and at a sufficient distance from the surface to which it is attached to permit the hasp to swing on the axis of its length to normally present its outer face in a downwardly-inclined direction.

4. The combination with a keeper, of a hasp having means whereby it may be permanently and loosely connected at one end to a support and having at its other end a rearwardly-projecting catch adapted to loosely engage said keeper to permit the hasp to swing on the axis of its length, said hasp having also a key-controlled mechanism for locking the catch in engagement with the keeper, the loose connection of the hasp at each end permitting it to normally present its outer face in a downwardly-inclined direction.

5. A lock comprising a casing, a catch movably mounted therein, and a locking-plate longitudinally movable in said casing and having a recess adapted to positively lock the catch, said plate having an integral spring adapted to bear on a portion of the catch to yieldingly hold it from moving when the locking-recess is disengaged.

6. A lock comprising a casing, a catch movably mounted therein, and a locking-plate longitudinally movable in said casing and having a recess adapted to positively lock the catch, said plate having an integral spring adapted to bear on a portion of the catch and having also an integral tumbler adapted to be engaged by a key.

7. In a lock, a bodily-movable locking-plate having an integral resilient tumbler.

8. In a lock, a bodily-movable locking-plate having an integral resilient tumbler, a fixed stop adapted to be engaged by said tumbler to hold the plate against movement, said plate also having portions to engage a movable member of a lock to prevent said member from being moved, the said plate having also portions adapted to be engaged by a key whereby the plate may be shifted after the tumbler has been disengaged from said stop by the key.

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

ALBA T. KINGSLEY.

Witnesses:

LEWIS HODGES,
A. W. HARRISON.