

No. 622,613.

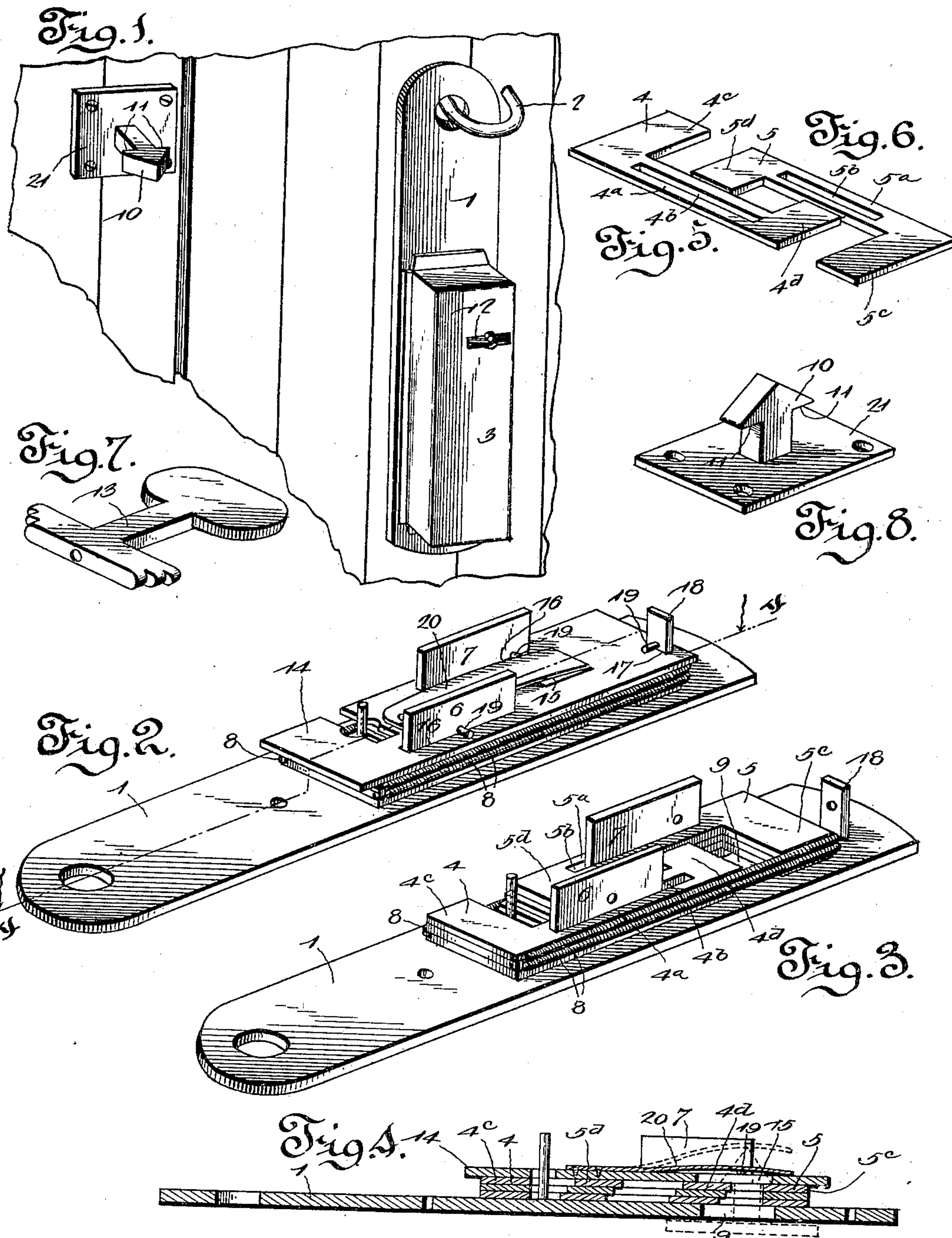
Patented Apr. 4, 1899.

F. FELDMANN.

HASP LOCK.

(Application filed Oct. 29, 1898.)

(No Model.)



Witnesses

*J. Kaufman*  
*E. R. Ryle*

Friedrich Feldmann Inventor.  
By his Attorneys,

*Cashner & Co.*



# UNITED STATES PATENT OFFICE.

FRIEDERICH FELDMANN, OF GEORGE, IOWA.

## HASP-LOCK.

SPECIFICATION forming part of Letters Patent No. 622,613, dated April 4, 1899.

Application filed October 29, 1898. Serial No. 694,946. (No model.)

*To all whom it may concern:*

Be it known that I, FRIEDERICH FELDMANN, a citizen of the United States, residing at George, in the county of Lyon and State of Iowa, have invented a new and useful Hasp-Lock, of which the following is a specification.

My invention relates to hasp-locks, and has for its object to provide a simple, compact, and efficient lock adapted for use in connection with hasps designed to be applied to barn and shed doors, boxes, crates, car-doors, mail-bags, or other receptacles, the operative parts of the lock being carried by a hasp, which may be arranged to the door or other part of the receptacle, as in the ordinary practice, for instance, by means of a staple, pivot-bolt, or the equivalent thereof.

A particular object of my invention is to provide a lock wherein the members are so related as to lie compactly in positions parallel or approximately parallel with the hasp, and also to provide means whereby the members of the lock, such as the tumblers, may be changed in relative positions to necessitate the use of different keys in the operation thereof.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a lock constructed in accordance with my invention. Fig. 2 is a similar view with the casing omitted. Fig. 3 is a similar view with the tumbler-covering plate omitted. Fig. 4 is a sectional view on the plane indicated by the line 4 4 of Fig. 2. Figs. 5 and 6 are detail views in perspective of two of the tumblers detached. Fig. 7 is a detail view of the key. Fig. 8 is a similar view of the catch.

Similar reference characters indicate corresponding parts in all the figures of the drawings.

In the lock embodying my invention 1 designates a hasp-plate adapted to be secured to a door or other portion of a receptacle by means of a staple 2 or any equivalent thereof, said hasp-plate also forming the base or bed plate, to which is secured a lock-casing 3, by means of concealed or blind screws or equivalent fastening devices inserted, for instance, from the inner or reverse side of the hasp-plate. Within the casing is arranged a plu-

rality of tumblers 4 and 5, substantially of identical construction, disposed in pairs, the members of each pair occupying a common plane parallel with the hasp-plate, but being disposed in opposite relations. For instance, each tumbler consists of a shank 4<sup>a</sup> or 5<sup>a</sup>, having a longitudinal slot 4<sup>b</sup> or 5<sup>b</sup> to receive a fixed guide-post, of which there are two, shown, respectively, at 6 and 7, a long tongue 4<sup>c</sup> or 5<sup>c</sup> at one end of the shank and a short tongue 4<sup>d</sup> or 5<sup>d</sup> at the other end of the shank, said tongues extending in a common direction from the shank. When the members of a pair of tumblers are arranged in operative positions, the short tongue of said members is arranged between the tongues of the other member and the extremity of the long tongue of said first-named member is arranged in alignment with the outer edge of the shank of the other member. In other words, each member of a pair of tumblers is provided with terminal long and short tongues, and when arranged in operative relations the tongues of the two members of a pair of tumblers are interlocked; but owing to the widths of the tongues of said members being less than the intervals between the terminal tongues of a member each member is capable of longitudinal sliding movement or movement parallel with the hasp-plate independently of the other member, and said members being guided, respectively, in such movements by the above-mentioned posts or ears 6 and 7, which are preferably flat, being elongated in directions parallel with the hasp-plate. Furthermore, the members of each pair of tumblers are connected by contractile springs 8, whereby either member of a pair may be extended longitudinally or moved in a direction from the other member of said pair, or both members of a pair may be moved in opposite directions or from each other simultaneously in opposition to the tension of the connecting-spring, which is designed to return said members when released to their normal positions with the corresponding terminal tongues of said members adjacent to each other. Aligned with the interval between the long tongue of one member of a pair of tumblers and the adjacent short tongue of the other member is a catch-opening 9, formed in the hasp-plate and adapted to allow the introduction of a catch 10 into



the lock-casing, said catch in the construction illustrated being shouldered at opposite sides, as shown at 11, and being tapered toward its extremity to form an arrow-head, and by placing the hasp with its catch-opening in alinement with the catch and forcing the hasp toward the catch the point of the catch will enter between the adjacent tongues of the pair or pairs of tumblers and will spread the members of each pair in opposition to their actuating-springs until said shoulders of the catch pass the planes of the members of the tumblers, whereupon the tumblers which have been repressed will return to their normal positions and engage said shoulders. Also arranged in the casing in alinement with the interval between the other corresponding terminal tongues of the pairs of tumblers is a key-slot 12, adapted for the reception of a preferably double-winged or plural-ward key 13, the wings or wards consisting of a cross-head at the inner end of the key-shank, and each being provided with a plurality of terminal seats corresponding in number with the number of pairs of tumblers in the lock. It will be understood that any desired number of pairs of tumblers may be employed and that the only difference between the several pairs of tumblers consists in a slight variation in the widths of the tongues or the lengths of the shanks. Obviously a difference in the widths of the tongues or the lengths of the shanks of two tumblers belonging to different pairs will necessitate a corresponding relative arrangement of the seats in the extremities of the wings or wards of the key in order that said tumblers may be moved through suitable intervals to disengage their tongues from the shoulders of the catch, and by varying the relative positions of the tumblers and the relative widths of their tongues or lengths of their shanks any desired variety of locks, necessitating different keys in their operation, may be produced.

Disposed to cover the uppermost pair of tumblers is a plate 14, having a catch-opening 15 in alinement with that in the hasp-plate, also provided with slots 16 to receive the guide-ears 6 and 7, which project forwardly from the hasp-plate, and an additional opening 17 to receive a post 18, also projecting forwardly from the hasp-plate, suitable keys 19 being engaged with openings in said ears and post to hold the tumbler-covering plate in place. Attached to and carried by this tumbler-covering plate is an ejecting or displacing spring 20, which must be repressed by the catch when the hasp-lock is applied thereto and which serves to eject the catch from the lock when the tumblers are disengaged from the catch. Obviously when the catch is fixed in position, as by a securing-plate 21, to a door-frame or otherwise the effect of said ejecting or displacing spring is to move the hasp forward and withdraw it from the catch when the tumblers are disengaged from the catch. This ejecting or displacing spring therefore

serves as a means whereby the hasp is automatically disengaged from the catch when the latter is released by the tumblers of the lock to avoid the necessity of manually disengaging the hasp when the tumbler-operating key has been turned sufficiently to properly position the tumblers. In practice the catch-plate 21 may be secured to the door-frame or other object by means of suitable screws, which, however, are covered by the hasp-plate when the latter is in its locked position, said catch-plate being of a width approximately equal to the hasp-plate.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having described my invention, what I claim is—

1. The combination with a hasp having a catch-opening, of parallel pairs of spring-actuated tumblers mounted for longitudinal sliding movement and provided with inwardly-extending parallel tongues, the members of each pair of tumblers being arranged in a common plane, and a casing carried by the hasp and inclosing the tumblers, and provided with a keyhole-slot registering with an interval between adjacent terminal tongues of the tumblers, substantially as specified.

2. The combination with a hasp having a catch-opening, of parallel pairs of spring-actuated tumblers mounted for longitudinal sliding movement, and provided with terminal inwardly-extending parallel tongues, the members of each pair of tumblers being arranged in a common plane, and a casing carried by the hasp and inclosing the tumblers, and provided with a keyhole-slot registering with an interval between the adjacent terminal tongues at one end of the tumblers, said catch-opening of the hasp registering with the interval between adjacent terminal tongues at the other end of the tumblers, substantially as specified.

3. The combination with a hasp having a catch-opening, of parallel pairs of tumblers provided with longitudinal slots, fixed guide-ears on the hasp engaging the slots of said tumblers, the members of each pair of tumblers being arranged in a common plane, and being provided with inwardly-extending parallel tongues, actuating-springs for the tumblers, and a casing carried by the hasp and inclosing the tumblers and provided with a keyhole-slot registering with an interval between adjacent terminal tongues of the tumblers, substantially as specified.

4. The combination with a hasp, of parallel pairs of spring-actuated tumblers, the members of each pair being arranged in a common plane and provided with inwardly-extending tongues, of which those at one end are adapted to engage a catch, a casing carried by the hasp and having a keyhole-slot registering with the intervals between the tongues at the other



end of the tumblers, and a tumbler-covering  
plate secured to guide-ears projecting for-  
wardly from the hasp-plate, and carrying an  
ejecting-spring for contact with and repres-  
5 sion by a catch arranged between the tongues  
at the first-named end of the tumbler, sub-  
stantially as specified.

In testimony that I claim the foregoing as  
my own I have hereto affixed my signature in  
the presence of two witnesses.

FRIEDERICH FELDMANN.

Witnesses:

C. T. TUPPER,  
MADISON PAGE.