(No Model.)

T. HASSHAGEN.

LOCK.

No. 562,077. Patented June 16, 1896.

Fig. 1.

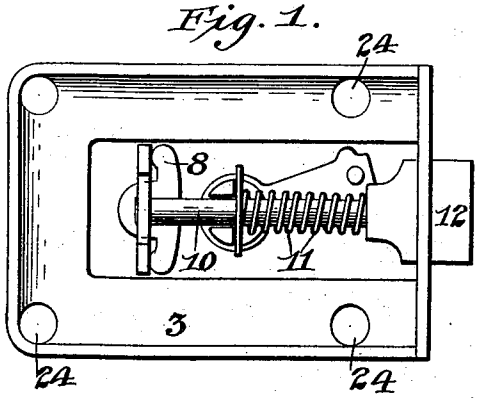


Fig. 2.

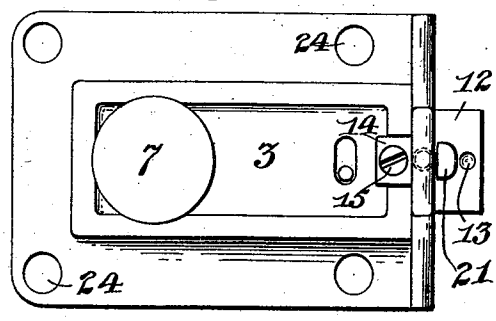


Fig. 3

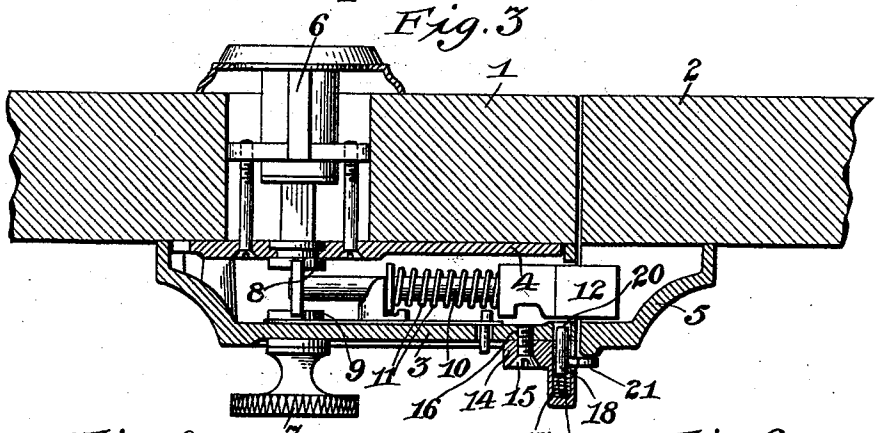


Fig. 4

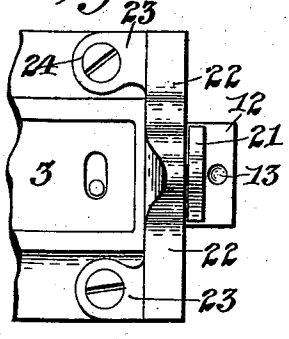


Fig. 5.

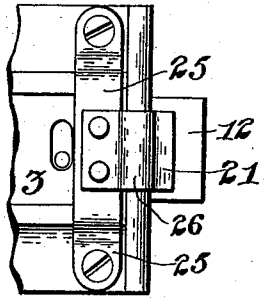


Fig. 6.

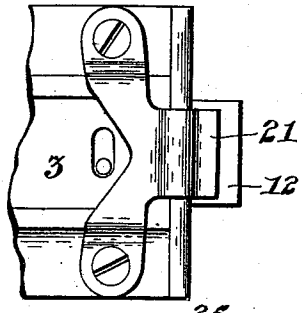


Fig. 7.

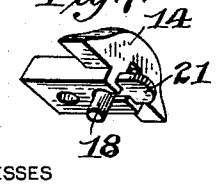


Fig. 8.

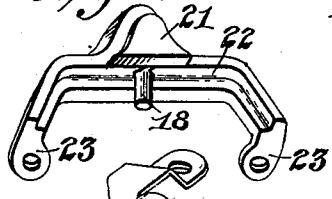


Fig. 9.

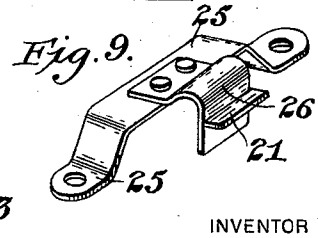
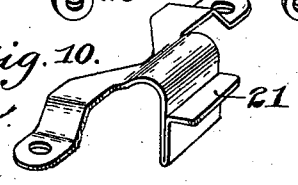


Fig. 10.



WITNESSES

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Atty.

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UNITED STATES PATENT OFFICE.

THEODOR HASSHAGEN, OF ABILENE, KANSAS.

LOCK.

SPECIFICATION forming part of Letters Patent No. 562,077, dated June 16, 1896.

Application filed November 1, 1895. Serial No. 567,641. (No model.)

To all whom it may concern:

Be it known that I, THEODOR HASSHAGEN, a citizen of the United States, residing at Abilene, in the county of Dickinson and State of Kansas, have invented certain new and useful Improvements in Locks, of which the following is a specification.

My invention relates to improvements in locks, and has for its object to provide a simple and economical attachment to certain kinds of locks at present in use whereby they may be rendered more secure against opening from the outside by unauthorized persons.

In what are commonly known as "spring night-latches" the bolt has the front face of its end beveled to cause it to be automatically withdrawn on contact with the bolt-socket, so that it is automatically locked when the door closes. An objection to this form of bolt has been discovered to be that it is possible to push back the bolt from the outside by pressing strongly upon the beveled face by a thin piece of steel inserted between the door and door-jamb.

The object of my invention has been to provide a simple and economical device for obviating this objection which can be applied to existing lock-casings of this character with little or no alteration in the lock, except the substitution of a square-headed bolt for the beveled-headed bolt.

In the accompanying drawings, Figure 1 is a view of the interior of the bolt-casing removed from the door. Fig. 2 is a view of its exterior, showing one form of my attachment applied thereto. Fig. 3 is a horizontal section through the lock and a portion of the door and door-jamb adjacent thereto. Figs. 4, 5, and 6 are views similar to Fig. 2, with the left-hand portion broken away to show modifications of the attachment as applied to the casing; and Figs. 7, 8, 9, and 10 are perspective views of the different forms of the attachment.

Referring to the drawings, 1 represents the door, and 2 the door-jamb.

3 is the bolt-casing, and 4 the casing-plate.

5 is the bolt-socket.

6 is an ordinary Yale lock, secured to the casing-plate by screws in the well-known manner, by means of which, or by the knob 7 on the inside of the door, through the medium of the cams 8 or 9, is actuated the bolt-stem 10, normally projected by a spring 11, all of which is of the customary construction.

In my improvement the bolt is provided with a square head 12, and, in the modifications illustratad in Figs. 2 and 4, this head has a socket or recess 13 on its inner face at a short distance from the edge. Upon the outside of the bolt-casing, near its outer edge, a small block 14 is secured, by means of a screw 15, Fig. 2, in a screw-hole 16, tapped in the casing. The block 14 is recessed, as at 17, on its under face to receive a pin or bolt 18, projected by a coiled spring 19, said pin passing through a hole 20, bored in the casing adjacent the edge thereof and being adapted to enter the socket 13 in the bolt-head when the latter is withdrawn. The spring 19 presses the pin into said recess and serves to retain the bolt after the door is opened and so long as it remains open.

When the door is closed, a tongue 21, projecting laterally from the pin 18, impacts upon the outer edge of the bolt-socket 5 and presses the pin 18, against the spring 19, out of the recess 13, thus releasing the bolt-head 12, which, under pressure from the spring 11, enters the bolt-socket.

In Figs. 4 and 8 I have illustrated a modification in which the block or plate 22 is provided with apertured wings 23, arranged to lie over the screw-holes 24, by which the lock is secured to the door, so as to avoid the necessity of boring the screw-hole 16 in existing casings.

In the modification illustrated in Figs. 5 and 9 I provide a plate 25 of sheet metal bent to shape and having apertures fitting over the screw-holes 24, and to this plate is riveted a spring-catch 26 of thin spring metal, projecting over the edge of the bolt-head when the latter is withdrawn and retaining the same, and provided with a tongue 21, extending from the same and adapted to impact upon the outer edge of the bolt-socket in the manner previously described.

In Figs. 6 and 10 I have shown a modification in which the entire attachment is stamped out of spring metal in a single piece, the parts operating as before described, as will be readily understood.

Having thus fully described my invention,

what I claim, and desire to secure by Letters Patent, is—

1. In a lock, the combination of a bolt-casing, a spring-actuated bolt, a spring-actuated stop limiting the projection of the bolt, a tongue operatively connected with said stop and arranged to impinge upon the edge of the bolt-socket to withdraw the stop and release the bolt, a plate supporting said stop and tongue independently of the bolt-casing and arranged on the outside of said casing, and means for securing said plate on said casing, substantially as described.

2. In a lock, the combination of a bolt-casing, a spring-actuated bolt, and an attachment for holding said bolt in said casing when the door is open, the same comprising a plate provided with means for securing it on the outside of the casing, a stop for restraining said bolt, and tongue arranged to impinge upon the bolt-socket to withdraw the stop, said attachment being formed of a single piece of sheet metal bent into shape, substantially as described.

3. In a lock, the combination of a bolt, a bolt-casing provided with screw-holes for affixing the same, a plate having holes lying over said screw-holes, a spring-actuated stop, carried by said plate, limiting the movement of said bolt, and a tongue arranged to impinge upon the bolt-socket to withdraw the stop, substantially as described.

THEODOR HASSHAGEN.

Witnesses:
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