No. 810,584. PATENTED JAN. 23, 1906.

W. S. SUTTON.

LOCK.

APPLICATION FILED DEC. 9, 1902.

Fig. 1

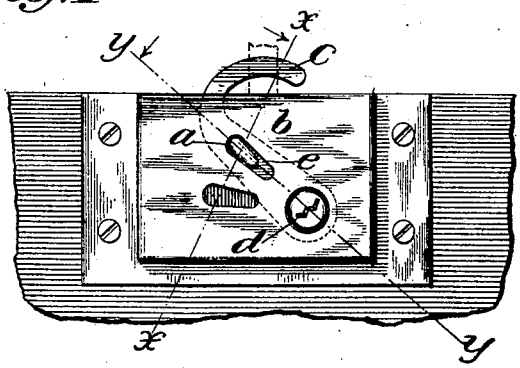


Fig. 2

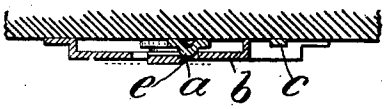


Fig. 3

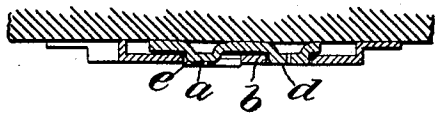
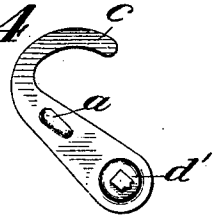


Fig. 4



Witness:
F. W. H. Clay
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by atty Paul Synnestvedt

UNITED STATES PATENT OFFICE.

WILLIAM S. SUTTON, OF ROCKFORD, ILLINOIS, ASSIGNOR TO AMERICA COMPANY, OF ROCKFORD, ILLINOIS, A CORPORATION OF ILLINOIS.

LOCK.

No. 810,584. Specification of Letters Patent. Patented Jan. 23, 1906.

Application filed December 9, 1902. Serial No. 134,554.

To all whom it may concern:

Be it known that I, WILLIAM S. SUTTON, a citizen of the United States of America, residing at Rockford, in the State of Illinois, have invented a certain new and useful Lock, of which the following is a specification.

The invention is intended to provide a simple and cheap lock or catch for use on doors, drawers, etc., and its principal objects are to dispense with the necessity of springs for holding the catch in proper position and to reduce the structure to extreme simplicity, and the cost to a minimum.

I have illustrated the essentials of the mechanism in a preferred form in the accompanying drawings, wherein—

Figure 1 is a plan view of the casing, showing the catch in locked position.

Figure 2 is a cross-section taken on line *x*—*x* of Figure 1.

Figure 3 is a section taken on line *y*—*y* of Figure 1.

Figure 4 is an illustration of the catch alone, with a modified form of stud for affixing the key.

The lock may be composed of two parts only, the casing *b* which contains the hook or catch *c* being utilized also to form the spring to hold the catch in the required position therein. For this purpose the casing *b* has two slits *e*, and upon the catch *c* is provided a rounded lug or bead *a*, which when the parts are assembled is of greater height than the space under the casing *d*. In moving from one of the said slots *e* to the other, therefore, the bead *a* will force up the section of the casing between the slits and the elasticity of the latter will serve to maintain the catch in position, either as locked or unlocked, by reason of the contact with the bead *a* on the edges of the spring section of the casing, as will be evident from Figure 2.

Both the bead *a* and the pivot-lug *d* of the catch may be stamped into the metal at the time the catch is cut, and the casing itself may also be made at one blow of the stamping tool. It will be observed that no other parts than these two are necessary, since the rounded lug *d* will serve as a pivot. The key slot in this lug may be made in any desired form, or the lug (*d'*) be made with a projecting angular stud to fit inside the key, as shown in Figure 4.

I am aware that locks have been made of two parts where the friction of the casing was depended upon to hold the catch in place, but in this present device the catch is positively held by the abutment of the bead *a* against the edge of the slot *e*, and is safe from accidental removal. It will be observed also that if the entire area of the casing were utilized as a spring, the motion thereof would very soon loosen the screws which attach the casing by inducing a longitudinal pull thereon, whereas in my device the section between the two slits alone is required to bend, and by proper design of the position and shape of the slits *e* the intensity of the spring may be accurately regulated at will, and does not depend upon the manner or accuracy with which the lock is screwed into its place.

In order to still further relieve the attaching screws of strain, and to use a heavy casing without making too stiff a spring, I sometimes continue the slits *e* to the pivot opening itself, so as to leave the split section in the form of a tongue. The form of the catch may be modified at will, as occasion may require.

Having thus described my invention and illustrated it in preferred form, what I claim, and desire to secure by Letters Patent, is the following:

1. A lock composed entirely of two integral parts, comprising a casing having a spring section separate from the main body portion and a pivot opening, and a catch stamped out of sheet metal and provided with a pivot lug and with a catch lug or bead adapted to engage the sides of the spring portion of the casing, substantially as and for the purpose described.

2. A two-part spring lock comprising a catch element made of sheet metal stamped with a pivot lug and a catch lug, and a casing and spring combined, stamped out of sheet metal and having a pivot opening and a separate spring section therein, substantially as described.

In testimony whereof I have hereunto signed my name in the presence of the subscribed witnesses.

WILLIAM S. SUTTON.

Witnesses:

PAUL CARPENTER,

RALPH W. HICKS.