No. 683,286. Patented Sept. 24, 1901.

W. S. HOUSER.

PADLOCK.

(Application filed Jan. 17, 1901.)

(No Model.)

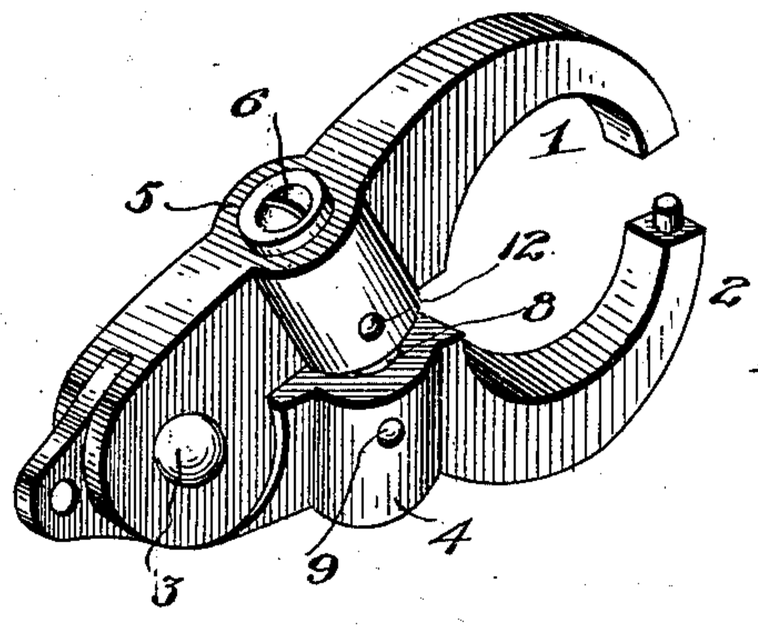


Fig. 1

Fig. 2

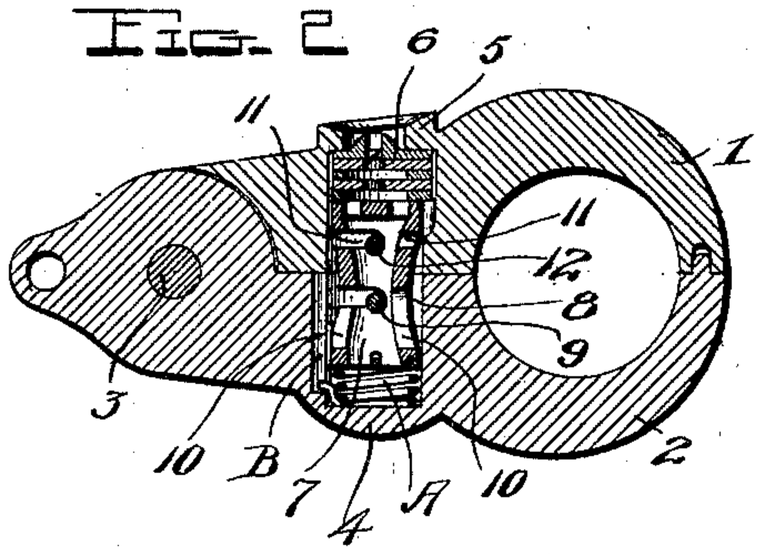


Fig. 3

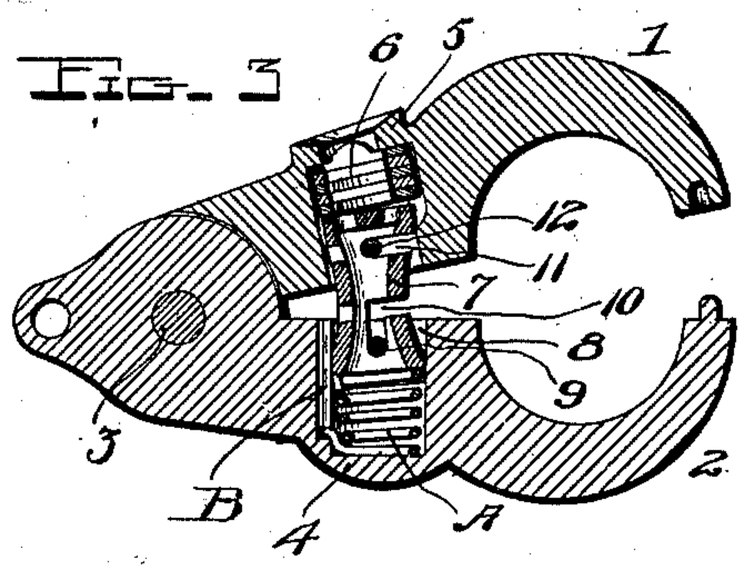
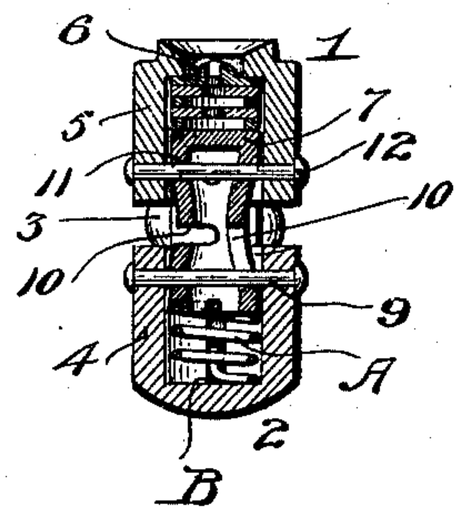


Fig. 5

Fig. 4



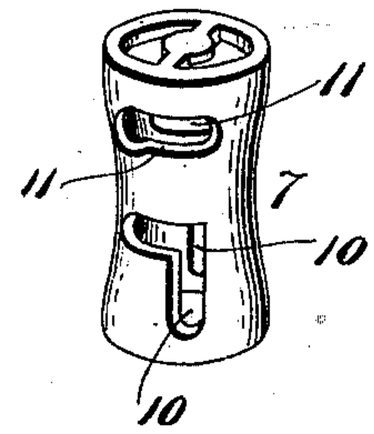


Fig. 6

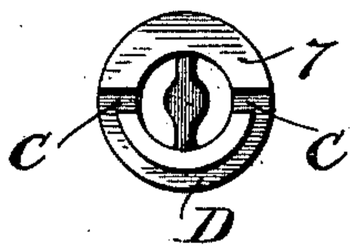
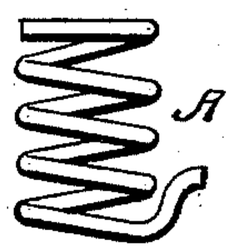


Fig. 7



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UNITED STATES PATENT OFFICE.

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PADLOCK.

SPECIFICATION forming part of Letters Patent No. 683,286, dated September 24, 1901.

Application filed January 17, 1901. Serial No. 43,624. (No model.)

To all whom it may concern:

Be it known that I, WINFIELD S. HOUSER, a citizen of the United States, residing at Bellefonte, in the county of Center and State of Pennsylvania, have invented certain new and useful Improvements in Padlocks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to padlocks designed for mail service, railway service, and for all other purposes for which a quick-acting, inexpensive, serviceable, and practically burglar-proof padlock may be required.

The object of the invention is to provide a padlock of this character which shall be simple of construction, durable in use, and comparatively inexpensive of production, and which may be easily and quickly locked and unlocked, and which when locked will be held with the shackles spaced apart, so as to be in position to be quickly engaged with the locking-staple or other device to which the padlock is applied.

With this and other minor objects in view the invention consists of certain novel features of construction and combination of parts, which will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved padlock, showing it in unlocked position. Fig. 2 is a longitudinal vertical sectional view showing the parts in locked position. Fig. 3 is a similar view showing the parts in unlocked position. Fig. 4 is a sectional view taken at right angles to Fig. 3. Fig. 5 is a detail perspective view of the locking-cylinder. Fig. 6 is a view of the lower end thereof. Fig. 7 is a detail view of the spring.

Referring now more particularly to the drawings, 1 and 2 denote two members or jaws constituting a shackle hinged together at 3 and provided with coacting sockets 4 and 5, in the latter of which is mounted keywards 6.

7 denotes a locking-cylinder, the lower end of which is seated in a socket 4 and is held in place therein by a pin 9, which extends through a bayonet-slot 10, formed in the side of the cylinder. The upper end of the cylinder projects into the socket 5 and is provided with a transverse slot 11, through which extends a pin 12, which secures said cylinder to the jaw or member 1. The upper end of the cylinder is constructed to be engaged by the key, so that it may be rotated to lock or unlock the jaws or members.

In operation, assuming the jaws or members to be in unlocked position and it be desired to lock them together, the jaws will be compressed to bring them together. In this compression the cylinder will be forced downwardly into the socket 4, and now by inserting the key and giving the cylinder a slight turn the pin will be brought into the horizontal portion of the bayonet-slot, thus locking the device. To unlock the device, the key is given an opposite turn, thus freeing the pin from the horizontal portion of the bayonet-slot and bringing it into the vertical portion of the bayonet-slot. When the pin is in the vertical slot, the jaws may be separated to disengage them one from the other.

The locking device thus described will meet the ordinary demands of the trade; but where a quick-acting lock is desired—such, for instance, when the lock is used in the mail service or for railway service—I provide a spring which serves a twofold purpose—namely, to hold the jaws separated when the device is in unlocked position, and thereby more readily permit of its connection with the staple or other device to which the lock is to be applied and to securely lock and hold the locked jaws when they are brought together. This spring is designated by the letter A and is seated in the socket 4, one end of the spring being fitted in a vertical groove B, formed in the wall of the socket, and the other end of the spring being bent crosswise its coil to engage notches C, formed in the lower end of the cylinder. This cylinder also has a curved seat D, which engages the upper coil of the spring. When the cylinder is in position in its socket and the straight portion of the spring is engaged with the notches C, the energy of the spring is exerted to force the cylinder upwardly and also to rotate it. Assuming the jaws to be locked, the pin will be in

the horizontal portion of the slot of the cylinder and will be held in its turn in the slot by the action of the spring. To unlock the device, the key is inserted in the usual manner and the cylinder given a slight rotation. This movement brings the pin to the vertical portion of the bayonet-slot and the spring now acts to elevate the cylinder, and in so doing it separates the jaws, and under the action of the spring the jaws are held in separated position to be readily engaged with the locking-staple or other device to which the padlock is adapted to be attached.

From the foregoing description, taken in connection with the accompanying drawings, the construction and mode of operation of my improved padlock will be readily understood without requiring a more extended explanation.

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

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A padlock consisting of two hinged members constituting a shackle, a locking-cylinder having rotary connection with one member and a pin and bayonet-slot connection with the other member, substantially as set forth.

2. A padlock consisting of two hinged members constituting a shackle, a locking-cylinder having a rotary connection with one member and a pin and bayonet-slot connection with the other member, and a spring rotating said cylinder and moving the same longitudinally, substantially as set forth.

3. A padlock consisting of two jaws pivoted together and constituting a shackle, a ward carried by one jaw, and a locking-cylinder having a pin-and-slot connection with one jaw and a pin and bayonet-slot connection with the other jaw, and a coil-spring connected to one end of the cylinder and exerting its energy to rotate and to move said cylinder longitudinally, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WINFIELD S. HOUSER.

Witnesses:

WILLIAM W. HAMPTON,

A. FAUBLE.