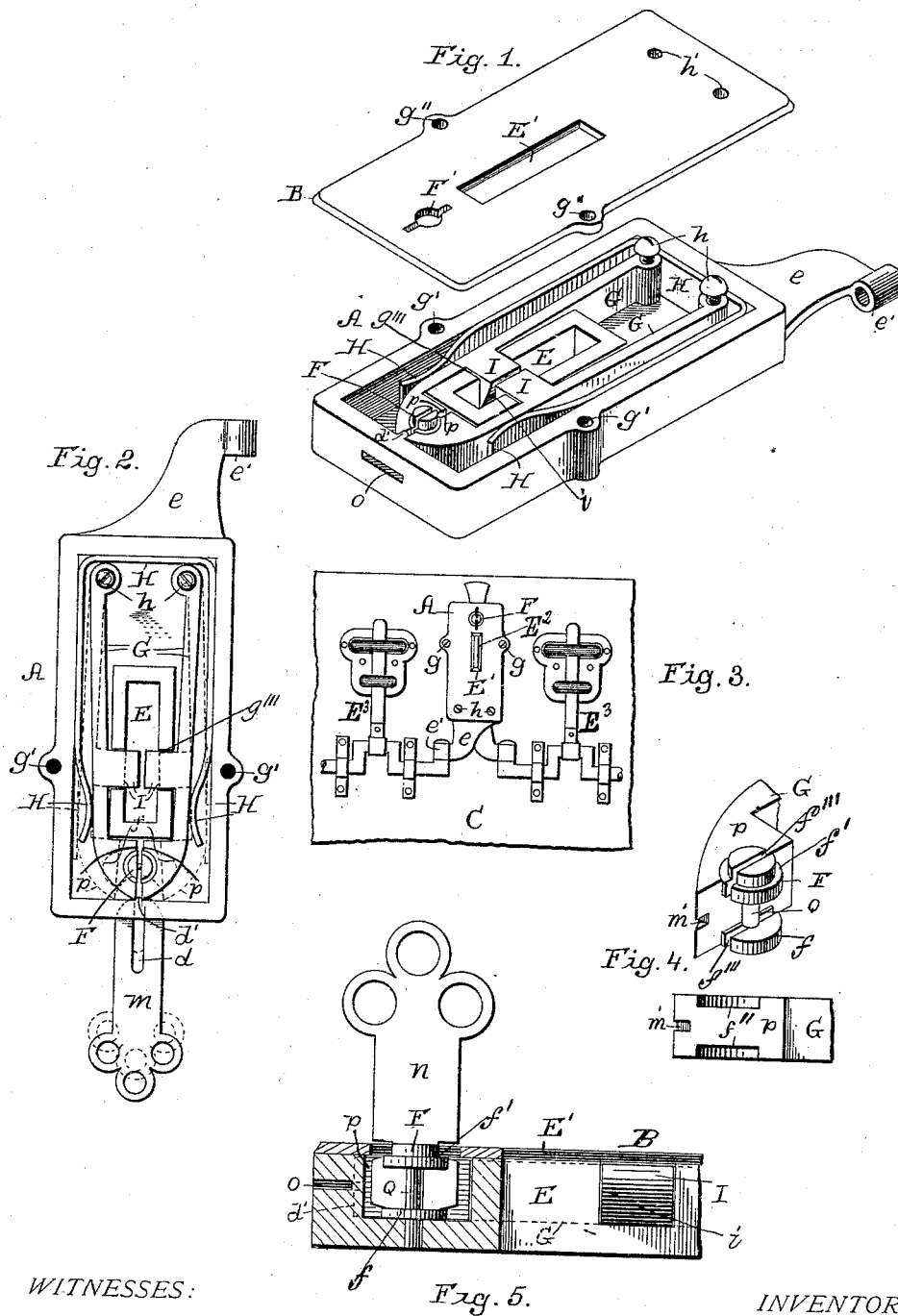


(Model.)

E. F. DAVIS.  
LOCK.

No. 422,740.

Patented Mar. 4, 1890.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

EDWIN F. DAVIS, OF CENTRALIA, KANSAS.

## LOCK.

SPECIFICATION forming part of Letters Patent No. 422,740, dated March 4, 1890.

Application filed April 22, 1889. Serial No. 308,090. (Model.)

*To all whom it may concern:*

Be it known that I, EDWIN F. DAVIS, of Centralia, Nemaha county, Kansas, have invented certain new and useful Improvements in Self-Closing Locks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to improvements in locks, more especially mail bag or pouch locks; and it consists of the novel combination of parts and their construction, as will appear from the following description and accompanying illustrations, in which—

Figure 1 is a perspective view of my improved lock, the covering-plate of the casing or closure being removed and adjacently disposed. Fig. 2 is a plan view thereof, also having the covering-plate of the casing or closure removed. Fig. 3 is also a plan view showing my lock as applied for use upon a mail pouch or bag, only a section or portion of the latter, however, being shown. Fig. 4 is a view of the locking-jaws and the tumbler, portions of the jaws being broken away; and Fig. 5 is an enlarged sectional view taken centrally through the key-holes, the key being in position in one of said holes, and portions of the jaws and casing or closure being broken away.

In the embodiment of my invention I employ a suitable casing or closure A, the covering-plate B of which is connected thereto by screws *g*, inserted through holes *g''* in the said covering-plate and into holes *g'* of the casing or closure.

G G are the locking-jaws, which are pivoted at one end by means of bolts *h h*, passing through holes *h'* in one end of the covering-plate B and entering the casing or closure A. The jaws G G have arranged between them a rectangular keeper or socket E, cast with the closure or casing A, while through lateral openings *g'''* in the sides of said keeper or socket project lugs or projections I, integral with said jaws, the under side of said projections or lugs being beveled, as at *i*. This permits of the jaws being readily sprung apart by the contact therewith of the locking or engaging staple as it is introduced into the casing or closure, as will more fully appear hereinafter.

It is a stout strong spring of approximately U shape fitted in the casing or closure A around the jaws G and having its free ends bowed, the convexities of which bowed portions bear against the sides of the jaws G near their free ends, forcibly holding the latter in their closed position.

The covering-plate B has an opening E', coincident with the chamber of the keeper or socket E, to permit of the passage of the locking-staple therethrough and its engagement with the lugs I of the locking-jaws.

F is the tumbler, having a central axial pivot Q, which bears or turns in an aperture in the bottom of the closure or casing A, near the extreme forward or one end of the latter. The tumbler F has two disks *f f'*, one being stepped and applied to the upper end of the pivot Q, while the other is plain and applied to said pivot a short distance upward from its lower end and rests or forms a bearing for the tumbler or pivot upon the bottom of the closure or casing A.

The peripheries of the disks *f f'* of the tumbler F are received into semicircular cavities or recesses *f''* in the opposite surfaces or faces *p* of the locking-jaws G near their extreme forward ends or edges, between which latter is arranged said tumbler. The disks *f f'* of the tumbler F are bisected or provided with central transverse slots *f'''*, which are adapted to receive from one (the upper or front) side of the closure or casing a key *n*, whose ribs or wings fit into the slots *f'''* of the said disks, and which, as the key is given a turn in the required direction, act upon the faces *p* of the jaws G G and effect the movement of the same away from each other and their disengagement from the locking-staple. The upper smaller step of the disk *f'* of the tumbler F bears or turns in the cylindric portion of the key-hole F' in the covering-plate B, while the key *n* has in its side edges opposite notches, as shown, permitting the turning of the key in actuating the tumbler.

*o* is a key passage or hole through the forward end of the closure or casing A, and upon the inside of the latter, centrally of said passage or hole, is a vertical rib or projection *d'*, which projects in between the forward edges of the faces *p* of the locking-jaws to hold the

latter slightly apart in their normal or closed position. The purpose of this is to more readily permit of the actuation of the said jaws by the action of a key *m*. This key has a central slot *d*, which receives the rib or projection *d'* as the key is introduced, and which permits the inner edges of the ribs or wings of said key to enter notches *m'* in the forward edges of the jaws, and thus assist the final passage or introduction of the key between the jaws at this point.

The application of inward endwise pressure upon the key *m* causes the separation or divergence of the locking-jaws, thus, as in the case of the turning of the key *n*, unlocking or disengaging the jaws from the locking-staple.

*E*<sup>2</sup> is the locking-staple, which may be such as is commonly used upon mail bags or pouches, a portion *C* of one of such bags or pouches being shown, together with its fastening devices *E*<sup>3</sup> of the swiveled bolt, crank-shaft, and supplemental staple pattern.

The lock casing or closure *A* has at one end a shank-like extension *e*, which has an eye *e'*, engaging or connecting with the crank-shaft of the fastening *E*<sup>3</sup>, and whereby connection is effected between the latter and the locking-staple *E*<sup>2</sup>.

It will be seen that upon throwing the jaws apart by either key the locking-staple can be withdrawn, which will permit the lock or casing *A* to be moved, so as to revolve the crank-shaft or crank-shafts, which will withdraw the bolt or bolts from the supplemental staple or staples of the fastening device *E*<sup>3</sup>, thus permitting of the unfastening or opening of the bag or pouch.

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

1. The locking-staple *E*<sup>2</sup> and the crank-shafts having the drop-bolts to engage supplemental staples, in combination with the lock-case connected to the crank-shafts, and thereby adapted to turn therewith, said lock-case having the keeper or socket *E* and coinciding openings to receive the staple *E*<sup>2</sup>, and

the spring-pressed jaws having the lugs *I* to engage the said staple, said lugs working in recesses in the keeper, substantially as described.

2. In a lock, the combination, with the casing or closure and the spring-pressed jaws having opposite locking-lugs, of the tumbler axially pivoted in said casing and having an upper stepped and slotted disk, and a lower plain and slotted disk bearing in concavities in the faces of the jaws, the upper smaller step of the upper disk resting in the cylindrical portion of the covering-plate key-hole, substantially as set forth.

3. In a lock, the combination, with the casing or closure having in its end a key-hole or opening, of the spring-pressed jaws having locking-lugs and in their forward edges cavities or notches, said casing or closure having upon its inside, about midway said key-hole or opening, a vertical rib or projection projecting between and holding the locking-jaws slightly apart, substantially as set forth.

4. In a lock, the combination, with the locking-jaws having in their forward edges notches or cavities and the casing having a hole or opening in one end and a vertical rib or projection upon the inside about midway said opening or hole, and projecting in between said jaws, of the key having a central slot opening through its operating end and receiving said rib or projection, the forward or operating end of said key engaging said notches or catches of the jaws, substantially as set forth.

5. In a lock, the combination of the spring-pressed jaws having locking-lugs engaging a locking-staple and the lock casing or closure having a shank-extension provided with an eye engaging a crank-shaft carrying a drop-bolt engaging a supplemental staple, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN F. DAVIS.

Witnesses:

A. C. DURLAND,

A. RISDON.