

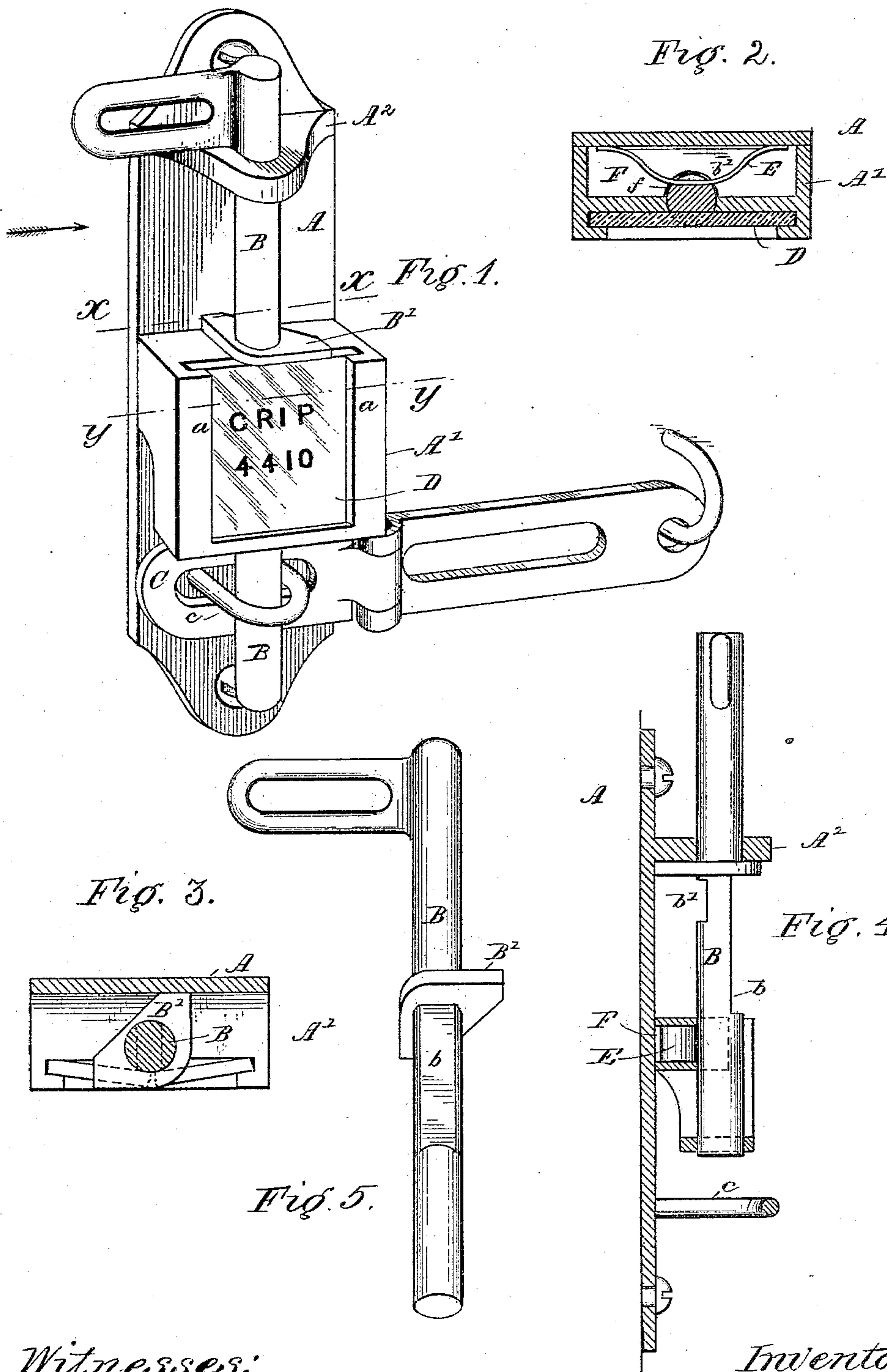
(No Model.)

C. E. DAVIS.

SEAL LOCK.

No. 381,534.

Patented Apr. 24, 1888.



Witnesses:
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UNITED STATES PATENT OFFICE.

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OF SAME PLACE.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 381,534, dated April 24, 1888.

Application filed September 15, 1887. Serial No. 249,734. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. DAVIS, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Seal-Locks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My present invention relates to seal-locks of the class for which Letters Patent of the United States were granted me October 4, 1887, No. 371,037, and is an improvement thereon, the same consisting in the matters hereinafter fully described, and set forth in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of my lock when in operative position. Fig. 2 is a transverse sectional view thereof taken upon the horizontal line Y Y of said Fig. 1. Fig. 3 is a like transverse sectional view taken upon the horizontal line X X of said Fig. 1. Fig. 4 is a vertical section taken through the center of the device, with the shackle-bolt shown in elevation, looking in the direction indicated by the arrow shown in said Fig. 1. Fig. 5 is an elevation of the shackle-bolt, the same being removed from the lock-frame.

The main features of my invention are embraced in the construction and relative operative arrangement of the several parts, the same being generally described as follows: The shackle-bolt, which is axially and perpendicularly movable within its bearings forming part of the lock-frame, is arranged and adapted, first, when withdrawn from its hasp-securing position to receive the frangible sealing-plate employed for securing the bolt in its locked position, and, second, through its return movement to its hasp-securing position, to guide the said seal to its seat provided within the frame, and when reaching such position to be automatically locked therein.

The construction and relative arrangement of the bolt and frame are such that the sealing-plate is operatively held in position inside the line circumferentially of the greatest diameter of the bolt, or, in other words, radially within

the arc described by the bolt in its axial or semi-rotative movement essentially preliminary to its withdrawal from its hasp-locking position, axial movement of the bolt bringing about its engagement with and destruction of the sealing-plate. The bolt is provided with means for preventing the removal of the sealing-plate from its operative position within the frame after being located therein, as mentioned, necessitating its destruction before the bolt can be withdrawn from its hasp-securing position; also, with means for properly checking or determining the length of travel of the bolt in describing its several movements.

Referring particularly to the several views of the drawings, which illustrate the most desirable form of construction of my invention, the lock-frame is composed of a base-plate, A, an overhanging shell, A', and a projecting lug or bracket, A². The bolt B, intended to hold the hasp C to the staple c, which is preferably fixed to or forms part of the lock-frame, journals in the bracket A² and in the lower wall of the shell A', being adapted to move axially and perpendicularly within its said bearings. The front or other position of the shell A' intended for sustaining the sealing-plate D in operative position exposed to view is provided on each side with a perpendicular slot, or with an overhanging portion, a, the same operating as guides for directing to its place and securing the seal in its operative or bolt-sealing position.

The bolt B is provided with a recess, b, of length and depth corresponding with the dimensions perpendicularly and transversely of the sealing-plate, and depth and length of the seal-seat formed within the frame by the overhanging portions a a, the axial position of the bolt being such with relation to the said seal that when the bolt is moved in a rotative direction its larger diameter or portion which extends beyond the floor of the recess b, or smallest diameter which moves through an arc which is obviously interrupted by the presence of the sealing-plate, which must be broken before the bolt can be carried through its full rotative movement to position, enabling its withdrawal perpendicularly from its hasp-securing position. The bolt is provided at the

upper termination of the recess *b* with a flange, *B'*, the said flange operating as a guard for securing the sealing-plate against withdrawal from its seat after being located therein and as
 5 a stop for determining the length of travel of the bolt through its several movements. The bolt is also provided on its side opposite the recess *b* with a recess, *b'*, within which works
 10 a locking device, preferably in the form of a leaf-spring, *E*, located within a chamber, *F*, projecting from the base *A*, within the shell *A'*, toward the bolt. The said chamber, being otherwise closed in the direction of the shell
 15 *A'*, is provided with an opening, *f*, within which the bolt snugly works and is capable of axial and perpendicular movement, the locking device contained within said chamber being in full effective operation in conjunction
 20 with the bolt, and at the same time thoroughly shut off from the possibility of being tampered with.

The operation of the device is as follows: The bolt *B* being moved axially a quarter revolution from the position shown in Fig. 1, its
 25 axial travel being checked by the flange *B'* coming in contact with the base *A*, is next moved perpendicularly until stopped by engagement of the said flange with the lug or bracket *A*². The bolt being next moved axially
 30 to the position shown in Fig. 4, the recess *b* is in position to secure the sealing-plate *D*. After the sealing-plate is located in said recess the bolt is moved perpendicularly to its original position, carrying the sealing-plate to its seat
 35 and being locked by the spring *E*, which drops into the recess *b'*. The bolt being thus locked in position, it is impossible to remove the seal-

ing-plate from its seat without first moving the bolt perpendicularly, which cannot be accomplished until the spring is forced from the
 40 recess *b'* by axial movement of the bolt, which movement brings about the destruction of the sealing-plate.

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

1. In seal-locks, the combination, substantially as herein set forth, of a lock-frame arranged and adapted to sustain in operative
 50 position a frangible sealing-plate, a shackle-bolt capable of axial and perpendicular motion, provided with a recess, *b*, which admits of the locating of the frangible sealing-plate within the frame and upon a plane perpen-
 55 dicularly within the arc of travel described by the larger diameter of said bolt, and a device or devices adapted to automatically secure said bolt perpendicularly in position from
 60 which it cannot be removed without being first turned upon its axis, all arranged with relation to each other and adapted to be operated substantially as described.

2. The combination, with a lock-frame adapted to sustain in operative position a frangible sealing-plate, of the axially and perpen-
 65 dicularly movable bolt *B*, provided with a recess, *b*, flange *B'*, and recess *b'*, and the spring *E*, all arranged with relation to each other and adapted to be operated substantially as shown and described.

CHARLES E. DAVIS.

In presence of—
 G. W. LE VIN,
 MARCH POLK.