

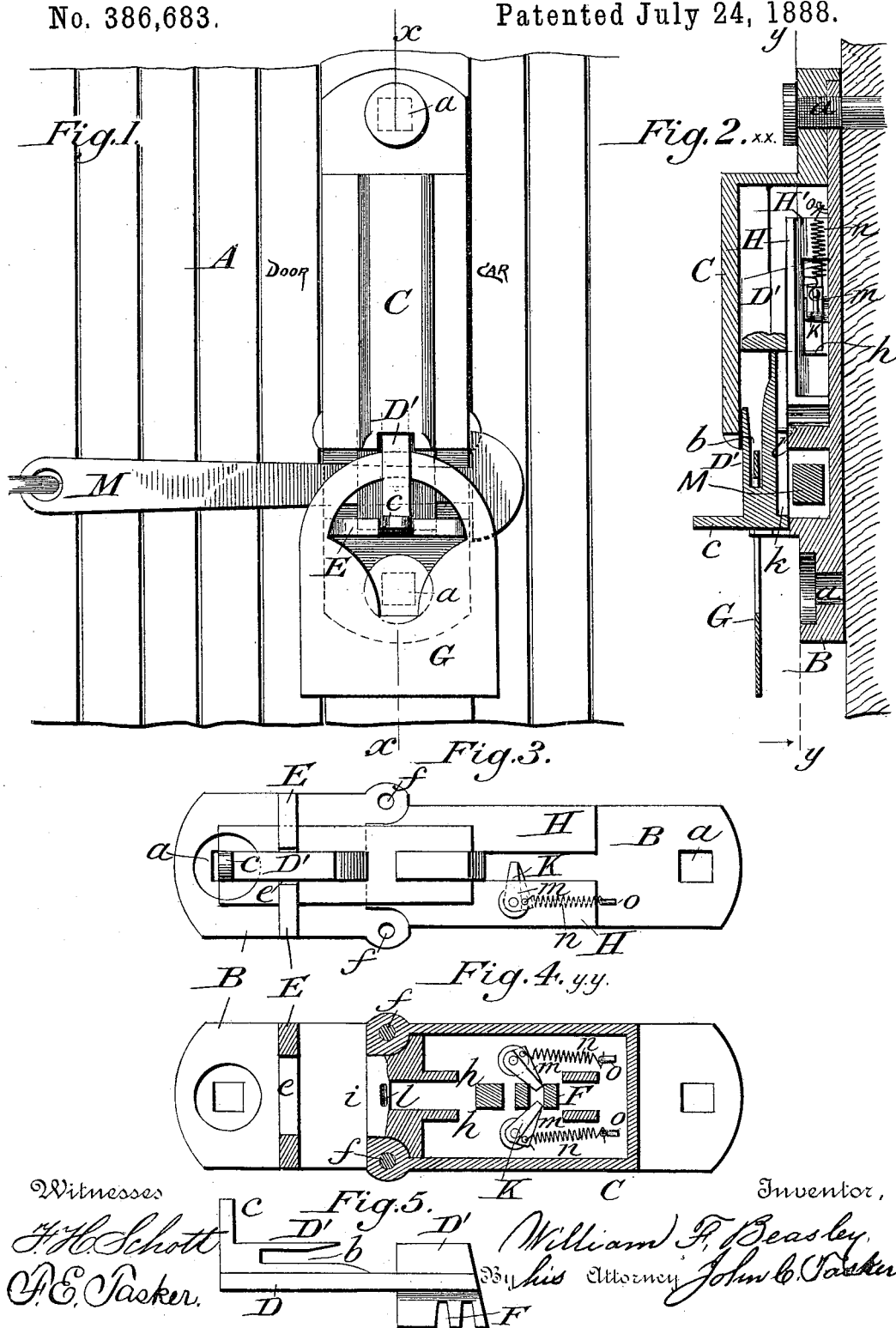
(Model.)

W. F. BEASLEY.

SEAL LOCK.

No. 386,683.

Patented July 24, 1888.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM F. BEASLEY, OF OXFORD, NORTH CAROLINA.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 386,683, dated July 24, 1888.

Application filed January 16, 1888. Serial No. 260,874. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM F. BEASLEY, a citizen of the United States, residing at Oxford, in the county of Granville and State of North Carolina, have invented certain new and useful Improvements in Seal-Locks; and I do hereby 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.

This invention relates to certain new and useful improvements in seal-locks or devices for securing the doors of warehouses, cars, &c.; and it consists in the construction, arrangement, and combination of parts, substantially as will be hereinafter described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a front elevation of a car, warehouse, or other place with my improved seal-lock applied thereto, the parts of the device being shown in the position that they occupy when locked. Fig. 2 is a vertical longitudinal section of the lock on the line *xx* of Fig. 1. Fig. 3 is a plan view of the lock with the cover of its casing removed and the bolt in its outermost position. Fig. 4 is a sectional view on the line *yy* of Fig. 2. Fig. 5 is a detail elevation of the bolt.

Like letters of reference designate corresponding parts throughout the different figures.

A denotes a portion of a car, bonded warehouse, or other structure with which my improved seal-lock is adapted to be used for the purpose of securely closing the same.

In Fig. 1 I have represented the lock in the position in which it is ordinarily placed upon said structure. The casing, which contains the parts of my improved lock, consists, essentially, of a base, B, which is provided with suitable bolt-holes located at any desirable and convenient points, as *a a*, for use in securing the base B to the door or other part of the car or house. The base B has a general rectangular or elongated shape. Near one end of it there projects outward at right angles a flange or staple, E, having a slot, *e*, suitably shaped to receive the end of the sliding bolt, to be hereinafter described. Integral with the base B are also formed parallel longitudinal castings H H, which extend a portion of the dis-

tance between the two extremities of the part B. These castings are hollowed out or interiorly recessed sufficient to permit the location therein of the dogs or pawls, by means of which the bolt is held in the desired position. Said castings H H are separated from each other by an intervening longitudinal passage, while their interior cavities, as H' H', Fig. 2, communicate with the passage between the castings through oppositely-located slots *h h*, Fig. 2. The castings H H have smooth upper surfaces, and at one end they connect, as at *i*, Fig. 4, where it is seen that the metal is so cast as to form a connection between the two parts H H at the end nearest to the staple E. The connection between the castings H H closes the passage-way between them at that end. The cover of the casing is designated by C. It is secured to the base-plate by rivets or screws at suitable points, as *f f*, said securing means being concealed or otherwise permanently covered, so that there can be no access to them after the parts of the lock are placed in position.

It will be noticed that in the drawings, and hence in the example of my invention which I am now describing, the screws *f f*, by means of which the cover is attached to the base of the lock-casing, have their heads on the bottom sides of said base, so that when the base is in position against the door of the warehouse or car there is no chance to detach the cover. When the cover has been placed in position, it is obvious that the interior mechanism of the lock will be effectually guarded against the entrance of any picking-tool.

The front end of the cover C is formed with an opening directly over the connection *i*, at the end of the parallel castings H H. Through this opening the sliding bolt is permitted to emerge during its reciprocations. Cover C is preferably constructed with a medial longitudinal groove or recess on its interior, which serves to receive and guide the rib upon the top of the sliding bolt. The sliding bolt is clearly shown in Fig. 5. It consists, essentially, of a flat plate, D, upon one side of which is a rib, D', which is suitably slotted at *b*, and which is broken away to allow the seal to be placed within said slot *b*. Further, at one end of the bolt is preferably formed a projection or handle, *e*, whereby the bolt is ma-

nipulated. On the other side of the flat plate D is formed another rib, which extends from one end of the bolt—that is to say, the end which, when the bolt is located in position in the lock, will be its innermost end—extends from this end for a convenient distance toward the other end, as will be seen by inspection of the drawings, and this rib has a series of one or more notches which the pawls or dogs are calculated to enter. On the under side of the part D of the sliding bolt is a central groove, *k*, which extends from the outer end of the rib F to a point very close to the outer end of the bolt directly beneath the handle *c*. The bolt is placed in the lock so that the flat plate will rest and slide upon the top of the castings H H, the rib F projecting downward into the intervening space between said castings, and the rib D' fitting nicely into the longitudinal groove in the cover C. A projection or lug, *l*, on the connection *i*, extends into the slot *k* in the bolt, and thus serves to more effectually guide the same. The dogs or pawls, which I have mentioned above as being located within cavities of the castings H H, consist simply of short pivoted pieces K, which turn upon bearings on the base B, and have lateral projections *m*, to which is connected a spring, *n*, passing to a stud or lug, *o*, projecting from the base B. The normal position of these dogs is shown in Fig. 3. The purpose of the spring *n* is to return the dog to its normal position after the bolt has displaced it. It is evident that there may be one pawl used, or there may be a pawl located in each of the castings, according to the judgment of the user of my improved seal-lock. The end of the dog extends into proximity to the notched rib F. When the bolt is reciprocated, it strikes against the dog or dogs, which bind the notched rib against the sides of the castings H H, forming, as it were, a sort of brace to prevent the reverse movement of the bolt.

From the foregoing description of the construction and arrangement of the several parts of my improved seal-lock the functions and operation of the same will be evident without need of further detailed description. When the bolt has been pulled out as far as possible, it will be seen to pass through the slotted flange or staple E. The rib D' will then have been removed sufficient from the cover C to allow its broken portion to become exposed, so that the seal may be inserted into the slot *b* of the bolt. The seals which I prefer to use in connection with this lock are composed of flat sheet metal formed in a single piece, having a smooth clear portion integral with which is a shackle or hasp-like end, which latter is adapted to enter the slotted bolt. When the bolt has been withdrawn and the seal inserted into the slot, the bolt can be pushed back within its case until it occupies the position shown in Fig. 1, where the seal is locked against removal until the bolt is again drawn out to expose the broken part of the rib D, so as to al-

low the seal to be taken out through this broken portion. It is evident that this outward movement cannot take place until the bolt shall have been forced still farther inwardly, or until it shall have been pushed sufficiently far within the casing to allow the notched rib F to pass beyond the dogs; hence the seal can by no possibility be released unless it is cut.

Fig. 4 shows the position of the dog K when it is binding upon the bolt and holding it in position. Suppose, for instance, that the bolt has been pushed into its innermost position, it is evident then that the dog K will be located as shown in Fig. 3, and the notched rib F will lie inward beyond this dog. When the bolt is withdrawn, the dog will be inclined reversely to what is shown in Fig. 4, and during the continued movement of the bolt it will drop first into one notch and then in the next, and while in any one of these notches it is obviously impossible for the bolt to be pushed back; but when the notched rib has passed the dog the bolt may easily be returned, for the spring *n* will cause the dog to take the position shown in Fig. 3, and hence when the bolt is pushed back the dog will drop into the notches in the manner illustrated in Fig. 4. When the bolt is in its outermost position, therefore, it can easily be pushed back in its innermost position, and when in its innermost position it can easily be forced out into its outermost position; but when it occupies the position shown in Fig. 1 and the seal has been placed in the seal-slot the bolt then can be forced in neither direction, for the dogs within the casing will prevent it from being pushed out and the seal will prevent it from being pushed in. There is no alternative, therefore, and no possible way of unlocking the device but by cutting the seal.

In securing doors by means of my improved seal-lock any ordinary hasp—as, for instance, the form designated M, consisting of a T-shaped piece of metal—may be used therewith. This hasp will be secured to the door in proper position to be dropped between the part *i* and the staple E. (See Fig. 1.) When the hasp is so located, the sliding bolt will be drawn outwardly, to cover it and to enter the staple E, the seal placed in position, and the bolt returned sufficiently to carry the broken portion of the rib D' again within the cover C, and thus prevent removal of the seal, but not sufficiently far of course to uncover the hasp M. In this manner it will plainly be seen that the hasp cannot be removed until the seal has been cut.

It will be obvious that the proportions and relations of the several parts must be carefully made with a view to accomplishing the results hereinbefore claimed for my improved seal-lock; but it will also be evident that a great variety of changes may be made in the mode of arrangement of the parts and in the mechanical details of the devices employed, in the uses to

which the invention may be put, and in the mode of carrying it into effect without departing from the spirit of my invention.

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

1. In a seal-lock, the combination of the base-plate having a slotted staple and parallel interiorly-recessed castings, the cover securely fastened to the base, the sliding bolt having upper and lower ribs, and one or more dogs, all arranged for joint operations, as set forth.

2. In a seal-lock, the combination of a base-plate provided with parallel longitudinal castings, having internal recesses and slotted to communicate with the intervening passage, a dog or dogs pivoted within said castings and projecting into the intervening passage, and a sliding bolt having a notched rib that moves within said passage and is adapted to be engaged by the dog or dogs, substantially as described.

3. In a seal-lock, the combination of the plate B, having slotted staple E and parallel recessed castings H H, the cover C, and the bolt consisting of a flat plate, D, having an upper rib, D', slotted at b, and the lower rib, F, suitably notched, all arranged substantially as described.

4. In a seal-lock, the combination, with the base B, having staple E, and recessed castings H H, of the spring-dogs located within said

castings H H, the sliding bolt having the notched under rib and the slotted and broken upper rib, the cover C, and the seal G, substantially as described.

5. In a seal-lock, the sliding bolt consisting of a plate having a notched under rib and a slotted and broken upper rib, in combination with a lock-casing, a spring dog or dogs, and a seal, as G, substantially as described.

6. In a seal-lock, the combination of the base B, having the slotted staple E and the parallel longitudinal castings H H, recessed at H' and slotted at h, the dogs K, pivoted to the base within the recessed castings, having lateral projections m, and governed by springs n, a sliding bolt having a notched under rib adapted to engage the dog or dogs, and a slotted upper rib broken to receive a seal, substantially as shown and described.

7. In a seal-lock, the combination, with the base B, the parallel recessed castings H H on said base, having the projection l, and the spring-dogs, of a sliding bolt consisting of a flat plate having a notched under rib, and likewise a groove, k, which receives the projection l, and having also a slotted upper rib, substantially as described.

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

WILLIAM F. BEASLEY.

Witnesses:

PHILIP MAURO,
FRED E. TASKER.