No. 824,392. PATENTED JUNE 26, 1906

H. P. TOWNSEND.

LOCK.

APPLICATION FILED APR. 6, 1904.

Fig. 1.

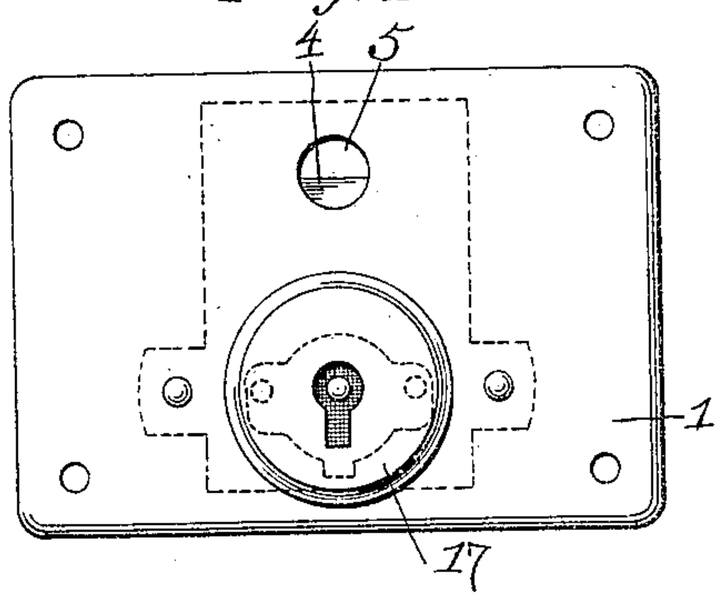


Fig. 2.

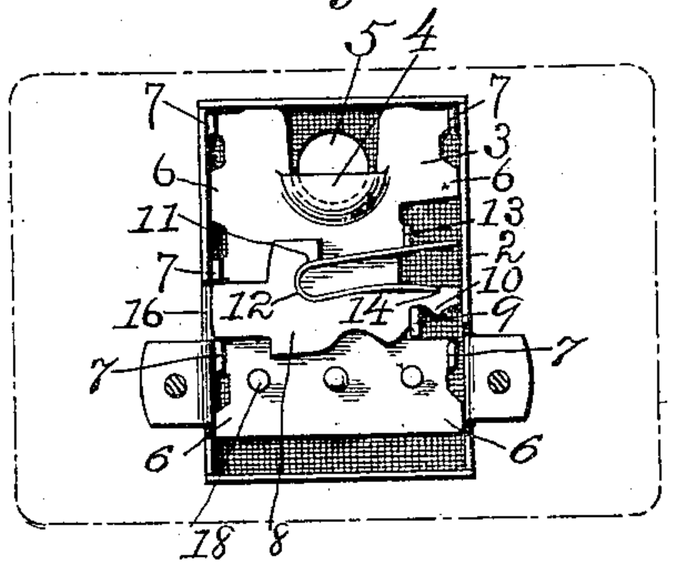


Fig. 3.

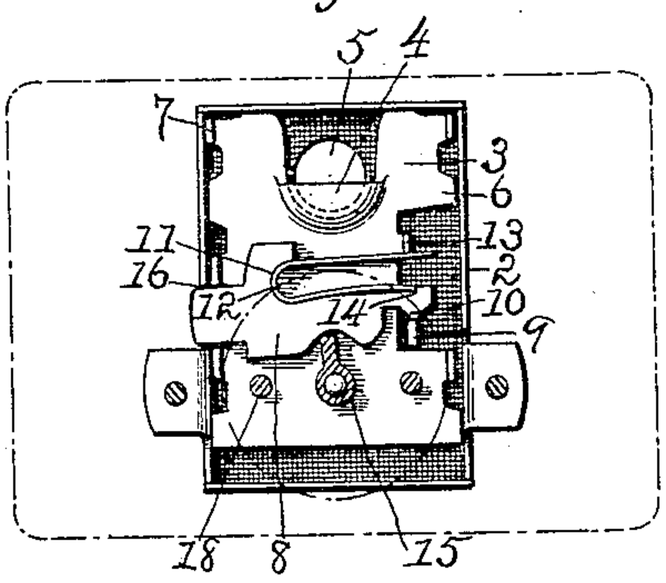
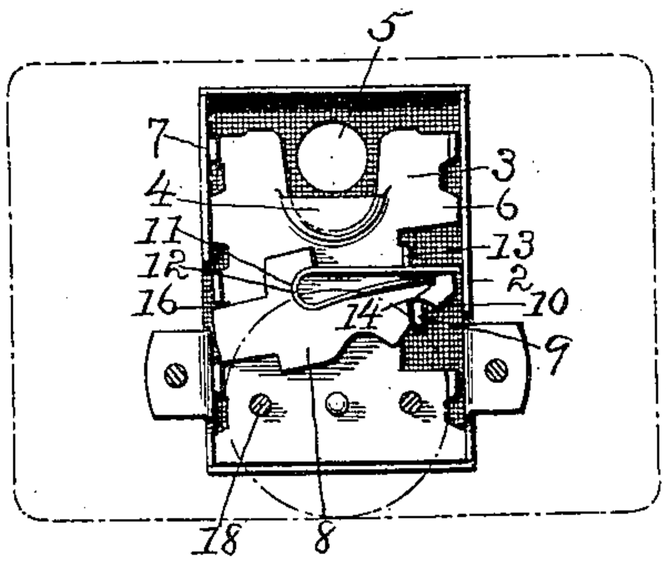


Fig. 4.



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UNITED STATES PATENT OFFICE.

HARRY P. TOWNSEND, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE CORBIN CABINET LOCK COMPANY, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

LOCK.

No. 824,392. Specification of Letters Patent. Patented June 26, 1906.

Application filed April 6, 1904. Serial No. 201,862.

To all whom it may concern:

Be it known that I, HARRY P. TOWNSEND, a citizen of the United States, and a resident of New Britain, in the county of Hartford and State of Connecticut, have invented a new Improvement in Locks, of which the following is a specification.

My invention relates more especially to locks employed for securing the cover of dress-suit cases, although the invention is not confined to use with such devices.

The object of my invention is to provide a lock that shall be extremely simple in construction and few as to number of parts; and a further object is to provide a lock that shall be extremely easy and free in its action; and a further object is to provide a lock that shall be extremely cheap of construction and durable as to its wearing qualities.

One form of device in the use of which my invention may be embodied is illustrated in the accompanying drawings, in which—

Figure 1 is a face view of my improved lock, the hasp not being shown. Fig. 2 is a like view with the face-plate and escutcheon removed and showing the parts in normal position. Fig. 3 is a like view showing the bolt partially advanced. Fig. 4 is a like view, but showing the catch-plate in position to allow release of the hasp.

In the accompanying drawings the numeral 1 indicates the face-plate of my improved lock.

The numeral 2 indicates the lock-case, to which the face-plate is suitably secured, and within this case a catch-plate 3 is located. This catch-plate has a lip 4 located in proximity to an opening 5 through the face-plate. This opening 5 is intended for the reception of a recessed stud located on the hasp, the lip 4 engaging the recess in the stud and holding the hasp in engagement with the catch-plate 3.

All of the parts hereinabove described are of old and well-known construction, and further description and illustration are therefore deemed unnecessary.

In the construction of locks of this class prior to my invention a catch-plate has been provided with upturned lugs, as shown at 7, closely fitting the inner walls of the lock-case and providing guides to hold the plate against both lateral and depthwise movement in the case, but allow it free lengthwise movement of the case. In the construction of guides of this form it is found that the dies necessary to produce the guides to exact gage laterally of the case to allow them to accurately fit the lock-case are soon worn to an extent to prevent the production of a catch-plate with guides to proper gage, the dies being extremely short-lived. When the dies become thus worn, the distance between the outer edges of the upturned lugs becomes less, so that the plate will fit loosely within the case. In order to obviate this difficulty, it has become necessary to provide a guide that may be produced by a die without extreme wear to said die and at the same time provide guides to hold the plate from movement depthwise of the case. In accomplishing this result I provide the catch-plate with lateral guides 6, projecting from opposite edges of the plate and preferably in the same plane. A die for producing these guides is extremely long-lived. For preventing movement of the catch-plate depthwise of the case I provide upturned guides 7, and it will readily be seen that dies for producing these upturned guides will also be extremely long-lived, for the reason that if the distance between the outer surfaces of the upturned guides shall be reduced as the die is worn the guide is not prevented from serving its full purpose. A bolt 8 is mounted on the catch-plate 3 and guided between two of said upturned guides 7 on the catch-plate, a portion of these projections serving as the guides to prevent movement of the catch-plate depthwise of the lock-case.

A stop 9 projects upward from the wall of the lock-case, and this stop acts, in connection with a cam projection 10 on the bolt, to hold the latter from free forward or backward movement, and particularly when the projection is held in engagement with the stop by the spring 11. This cam projection has two cams inclined in opposite directions and terminating in a point, said cams acting, in connection with the stop 9 and under the pressure of said spring, to assist in movement of the bolt in either direction after the point has passed the lug 9. This spring has its curved end located in a recess 12 in the bolt, and the opposite ends or arms of the spring press one against a lug 13 on the catch-plate

and the other against a shoulder 14 on the bolt. It will thus be seen that when the bolt is moved forward, as by the key 15, the point of the cam 10 will ride upon the stop 9 until the rear cam-face comes in contact with this stop, and the spring pressing this cam-face in contact with the stop will cause the bolt to shoot forward into the recess 16 in the bolt-case to lock the catch-plate against sliding movement. In this position the pressure of the spring forcing the cam-face in contact with the projection 9 will prevent free sliding movement of the bolt. This spring also serves to hold the catch-plate in its normal or operative position—that is, in position to engage the hasp. The tendency of the arms of the spring to open and the force on one of the arms being resisted by the stop 9, the force of the spring is permitted to act through the other arm on the lip on the lug 13 and force the catch-plate into said position.

The escutcheon 17 is secured to the catch-plate, as by means of the studs 18, and serves as a means for moving the catch-plate to disengage it from the hasp, this escutcheon being also provided with a keyhole-opening for the insertion of a key.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a lock, in combination, a lock-case, a sliding plate located within said case and having laterally-extending lugs forming lateral guides and depthwise-extending lugs on opposite edges of the plate forming depthwise guides, a bolt operatively connected with said plate, and means for operating the bolt.

2. In a lock, in combination, a lock-case, a catch-plate located within the case and having means for engagement of a hasp, a bolt mounted on the catch-plate, a spring, means coacting with said spring to obstruct free movement of both the bolt and catch-plate and to move the catch into operative position, and means for operating the bolt.

3. In a lock, in combination, a lock-case, a sliding plate located within the case and having lugs projecting from opposite edges to engage the wall of the case and guide the movement of the plate therein, and depthwise-extending lugs formed upon opposite edges of the plate, and means for causing sliding movement of the plate.

4. In a lock, in combination, a lock-case, a plate mounted to slide in the case, a lug located on the plate, a bolt mounted on the plate and having a spring-recess, a shoulder facing said recess and a cam projection operating in connection with a stop from the case, the stop, a bent spring with its bent portion located in said recess one arm resting against said lug and the other against said shoulder, and means for operating the bolt.

5. In a lock, in combination, a catch-plate located within the lock-case and having means for engagement with a hasp, a sliding bolt mounted on the catch-plate and having a cam projection acting upon a stop on the wall of the case, the stop, and a single spring forcing the bolt in engagement with said stop and holding the catch-plate in operative position, and means for operating the bolt.

6. In a lock, in combination, a lock-case, a sliding plate located within the case and having depthwise-extending lugs forming depthwise guides, a sliding bolt mounted on the catch-plate and guided between said lugs, a single spring acting upon both the bolt and the catch-plate, and means coacting with said spring to prevent free movement of the bolt and to hold the catch-plate in operative position.

7. In a lock, in combination, a lock-case, a catch-plate located within the case, a bolt mounted on the catch-plate, a spring secured to the bolt and bodily movable therewith and operatively acting upon both the bolt and the catch-plate, and means for operating the bolt.

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