C. F. BELLOWS.

POCKET DOOR LOCK.

APPLICATION FILED OCT. 21, 1911.

1,089,688. Patented Mar. 10, 1914.

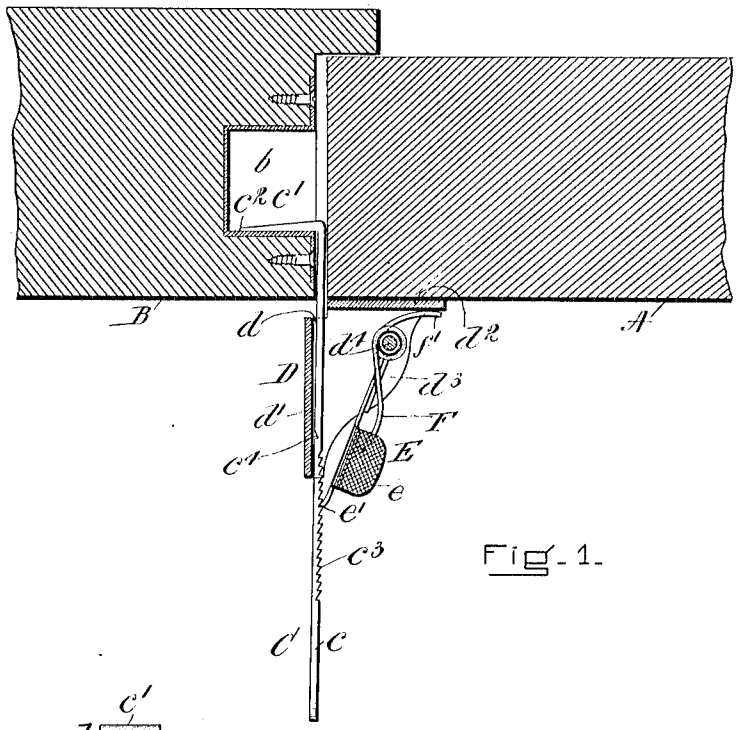


Fig. 1.

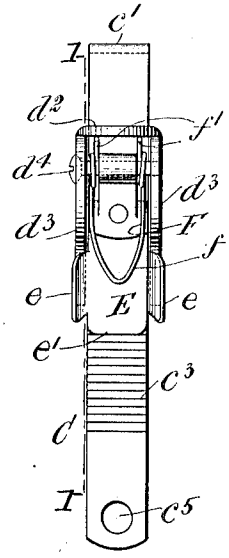


Fig. 2.

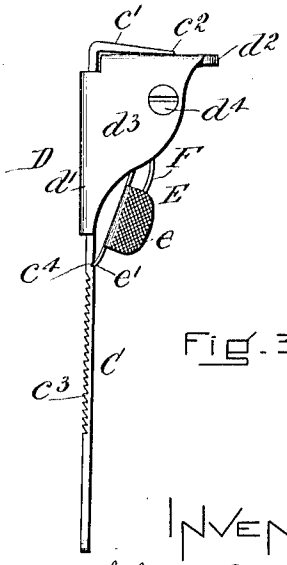


Fig. 3.

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POCKET DOOR-LOCK.

1,089,688. Specification of Letters Patent. Patented Mar. 10, 1914.

Application filed October 21, 1911. Serial No. 655,992.

To all whom it may concern:

Be it known that I, CHARLES F. BELLOWS, of Boston, in the county of Suffolk and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Pocket Door-Locks, of which the following is a specification.

My invention is intended especially for the use of travelers, and it comprises a part temporarily attachable to the door jamb when the door is to be closed and a part carried by the first-named part adapted to engage the door in such a manner that the door cannot be opened.

The device is of such a character that it may be readily attached and detached and while strong enough to lock the door is small enough to be carried in the traveler's bag or pocket.

My invention will be understood by reference to the drawings in which it is shown in its most convenient form.

Figure 1 shows my detachable lock in section on line 1—1 of Fig. 2, the lock being attached to a door and its jamb, these latter parts being shown in horizontal section. Fig. 2 is a front elevation, and Fig. 3 is a side elevation with the bolt in normal position.

A represents a portion of a closed door and B is a portion of a frame against which it closes, *b* being the recess to receive the door latch.

My invention comprises two parts preferably separable, one of which I term a bolt and the other a lock. The bolt is lettered C and one end is bent at a right angle to its shank *c* to form a projection c^1 which as shown hooks into the recess *b*. I prefer to sharpen the end of this projection as at c^2 so that if necessary it may be forced into the woodwork of the jamb. On the side opposite this projection the bolt C is provided with teeth forming a ratchet c^3 to be engaged by an appropriate portion of the lock as below described and on the opposite side it is provided with a groove c^4 for the same purpose.

In its preferred form the lock comprises a housing D formed with a foot portion d' which is parallel with the shank *c* of the bolt and is situated entirely on one side thereof and the door-engaging wall d^2 extending at right angles to the foot portion and extending entirely on the opposite side of the bolt, said door-engaging wall d^2 being adapted to engage the door when the device is in operation. The housing D also comprises two side walls d^3 which connect the door-engaging wall d^2 with the foot portion d', said housing being further formed with a slot or opening *d* at the inner end of the door-engaging wall d^2, through which slot the bolt C passes. The side walls d^3 form bearings or supports for the screw d^4 which acts as a pivotal support for the pawl E. This pawl E is located in the housing between the side walls d^3 and is acted upon by a spring F which presses the free end of the pawl toward the bolt. The spring F is bent into the form of a loop, the looped portion *f* bearing against the free end of the pawl E and the ends extending rearward around the screw d^4 and terminating at f' in engagement with the inner surface of the door-engaging wall d^2 of the housing. The spring-pressed pawl E is adapted to engage the ratchet c^3 thereby to prevent longitudinal movement in one direction of the locking member on the bolt. The pawl E further acts to hold the bolt from movement laterally away from the foot d' of the locking member. Said pawl, therefore, has two functions, to wit: to prevent longitudinal movement of the locking member on the bolt, and to hold the bolt from moving laterally away from the housing. The pawl E has finger pieces *e* at its free end by which it may be lifted and also the sharpened edge e' by means of which it engages the ratchet on the bolt C.

Fig. 1 shows the device in use. The pawl E being lifted by the use of the finger pieces *e*, the lock is slid along the shank away from the bent end of the bolt. The projection c^1 is brought into engagement with the door jamb. The door is then closed against the side of the bolt as shown and the lock D is then pushed up against the door. The pawl will then engage one of the ratchet teeth c^3 and hold the lock so that the door cannot be opened from the outside. To open the door again from the inside the pawl is lifted as before and the lock is slid back along the shank *c* of the bolt until the door can be swung open. The door then being opened, the bolt can be removed.

To carry the device when not in actual use the bolt is removed from the lock, reversed and again inserted in the slot *d* and pushed down so that the projection c^1 engages the lock D as shown in Fig. 3. The pawl E

then engages the groove c^4 and holds the parts together.

Upon referring to Fig. 2 it will be noted that the finger pieces e lie substantially in the planes of the side walls d^3 and that said finger pieces extend at a slight inclination to these side walls. This inclination of the finger pieces makes a construction which can be readily grasped between the thumb and fore-finger for releasing the pawl from the bolt C but at the same time it provides a construction that presents no appreciable laterally-extending parts.

One of the objects of the present invention is to provide a door lock of this nature which can be readily carried in the pocket and an important feature of a pocket door lock is that it should be light and that there should be no projecting parts which will catch in the clothing when the device is in the pocket or that will make the device an unwieldy or cumbersome thing to carry in the pocket. These objects are secured by my invention, for it will be noted that when the device is in condition for placing in the pocket as shown in Fig. 3 it presents no laterally-extending projections, the finger pieces e being specially designed to obviate such projections.

Above is described the simplest form of my invention now known to me, but its details may be varied in construction without departing from the spirit of the claim.

I prefer to make the device in two separable parts, but this is not essential. It is a convenience, however, as it enables the device to be packed in small compass to be carried in the pocket or traveling bag as shown in Fig. 3. The bolt is provided with a hole c^5 so that if it is to be regularly used with a particular door it may be hung on a hook alongside the door.

What I claim as my invention is:—

A pocket door lock comprising a bolt having means to engage a door jamb, and a housing formed of pressed metal slidable on the bolt and having a foot portion lying entirely on one side of the bolt and a door-engaging wall extending at right angles from the foot and situated entirely on the opposite side of the bolt, whereby said bolt is situated between the foot portion and door-engaging wall, said housing also having two side walls on the side of the bolt below the door-engaging wall, a spring-pressed pawl pivotally mounted between said side walls in bearings formed therein, said pawl acting both to maintain the bolt in position against the foot portion and to prevent the locking member from moving longitudinally of the bolt in one direction and finger pieces extending from opposite sides of the pawl adjacent its free end and situated in the general plane of the side walls at a slight inclination thereto.

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Witnesses:
GEORGE O. G. COALE,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."