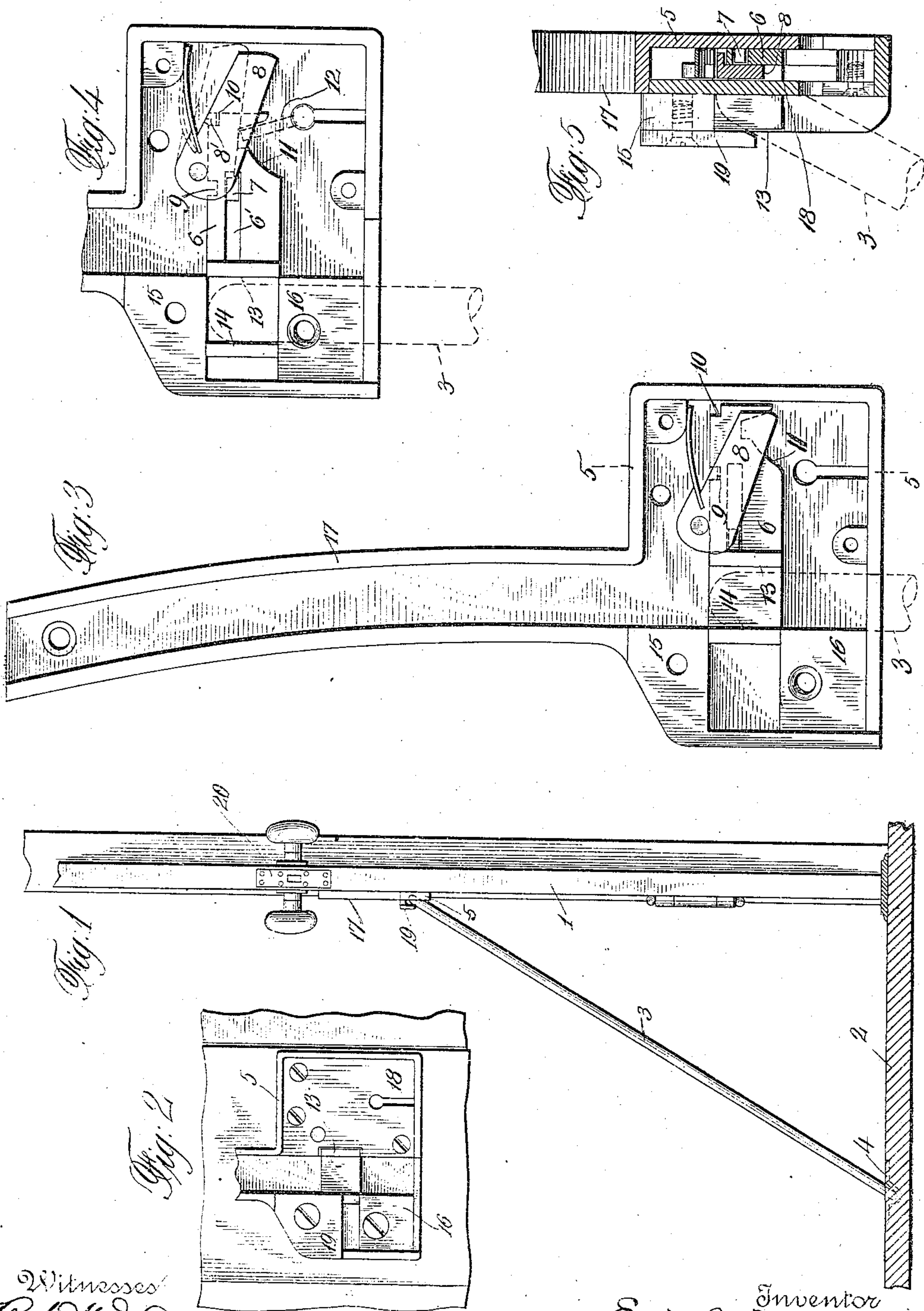


No. 843,527.

PATENTED FEB. 5, 1907.

E. R. FUCHS.  
DOOR SECURER.

APPLICATION FILED APR. 23, 1906.



Witnesses  
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# UNITED STATES PATENT OFFICE.

EMIEL R. FUCHS, OF NEW YORK, N. Y.

## DOOR-SECURER.

No. 843,527.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed April 23, 1906. Serial No. 313,243.

*To all whom it may concern:*

Be it known that I, EMIEL R. FUCHS, a citizen of the United States, and a resident of the city of New York, in the State of New York, have invented certain new and useful Improvements in Door-Securers, of which the following is a specification.

In my application Serial No. 307,014, filed March 20, 1906, I have described a door securing means comprising a bar set against an abutment fixed to the floor and adapted to be moved into and out of engagement with an abutment fixed to the door. In the particular embodiment of the invention illustrated in that application the upper end of the securing-bar is retained in a casing and moved into engagement with an abutment inclosed within the casing by the movement of a bolt of any ordinary type of lock and moved in a reverse direction by a spring.

The present application relates to a specific form of the invention heretofore disclosed and comprises as its essential feature means for moving the bar positively in both directions.

The invention will be understood by reference to the accompanying drawings, in which—

Figure 1 is an end elevation of a door, showing the invention applied thereto; Fig. 2, a front elevation, partly broken away, of the mechanism for retaining and moving the bar; Fig. 3, an enlarged view of Fig. 2 with the covering-plates removed and the guide for the rod shown in full; Fig. 4, a view similar to the lower part of Fig. 3 with the parts in position to secure the door, and Fig. 5 a transverse vertical section on the plane of the line 5 5 of Fig. 3.

Similar reference-numerals indicate similar parts in the several views.

Referring to the drawings, the numeral 1 designates a door, and 2 the floor of a room or passage-way, entrance into which is effected through the door. For the purpose of securing the door against forcible entry I provide a bar 3 of sufficient length for the purpose, and which in practice may be made of one-half-inch iron. The lower end of said bar is stepped into a socket 4, secured in an opening in the floor and constituting an abutment of sufficient strength to resist the thrust of the bar.

Secured to the inner side of the door is a casing 5, which incloses the lock members and is adapted to receive the upper end of

bar 3. The lock within the casing 5 comprises a bolt 6, having a slot cut therein at 6'. A stud 7, fixed to the inner wall of the casing, engages said slot to guide the movements of the bolt. Pivoted above the bolt is a spring-pressed tumbler 8, having a stud 8' thereon adapted to engage notches 9 and 10 on the bolt 6 to retain the latter in its two extreme positions. The under side of the bolt is recessed at 11 to receive a key 12 for throwing the bolt, the tumbler being so located as to be first released by the key, as will be readily understood.

Projecting laterally from the bolt 6 are two walls 13 and 14, spaced sufficiently far apart to permit easy entrance between them of the upper end of bar 3, as indicated in Figs. 3 and 4, it being apparent that as the bolt is thrown in either direction the bar 3 will be moved, while its lower end remains seated in the socket 4. At its outer end bolt 6 travels between two blocks 15 and 16, secured to the casing 5, the former extending between the front and inner walls of the casing and constituting an abutment for the upper end of bar 3 when moved to locking position, as shown in Fig. 4. The casing 5 is formed with an upwardly-curved section 17, open at the front throughout its length, said section constituting a guideway for the bar when the door is being opened or closed. The lower end of this guideway is directly above the space between the walls 13 and 14 when the bolt is in the position shown in Fig. 3, and said guideway is laid out upon a curve sufficient to permit the travel of the bar 3 therein without wedging.

The casing 5 is provided with cover-plates 18 and 19, which protect and conceal the inclosed lock members, except the portion of the bolt 6 which is exposed between their inner edges, this open space affording means for the introduction or removal of the bar when the bolt is in the position of Figs. 2 and 3.

When the occupant of the room desires to secure the door, the bar 3 is seated in socket 4 and the upper end thereof placed in position between the walls 13 and 14 of the bolt. By means of key 12 the tumbler 8 is raised, so as to release stud 8' from engagement with notch 9 of the bolt, and by turning the key in the proper direction as it engages one of the walls of recess 11 the bolt will be thrown to the left, thus moving the upper end of bar 3 against the under side of the block or abutment 15. At the limit of its inward throw,



as indicated in Fig. 4, the bolt will be maintained in position by stud 8' engaging the recess 10, thus preventing the reverse movement of bar 3. In that position of the bar its upper end abuts firmly against the block 15 and is immovably held between the two walls 13 and 14 of the bolt, thus effectually resisting any effort to open the door from the opposite side. When bolt 8 is retracted by the key, the bar 3 will be returned to the position indicated in Fig. 3. The door may then be opened, and as it swings inwardly the bar will move upwardly into the curved guideway 17, the lower end of the bar remaining seated in socket 4. The extent of the opening movement of the door will depend upon the length of the bar and the angle at which it is set relatively to the door. During the day when there is constant ingress and egress through the door the bar may be removed, so as to permit of the full opening movement of the door, being replaced whenever the room is to be vacated or at other times when it is desired to secure the door.

The invention may be applied to any type of swinging door, and with a slight rearrangement of the relative positions illustrated it may be applied to a sliding door. The door may be provided with any ordinary type of latch-lock 20 for temporarily retaining the door in closed position. This, however, has no relation to the present invention.

It will be understood, of course, that I have shown an ordinary type of tumbler-lock for moving the bar 3, the bolt of said

lock being modified, as above described, to effect the movements of the bar into and out of engagement with the abutment 15.

Any other form or type of lock may be employed, provided that it is so modified to move the securing-bar positively in both directions.

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

1. A door-securing mechanism comprising a bar adapted to rest against the door, an abutment on the floor against which the lower end of said bar is set, a fixed abutment secured to the door, and a single or common key-actuated means for moving said bar laterally and positively in both directions so as to carry it into or out of engagement with the door-abutment.

2. A door-securing means comprising a bar, an abutment on the floor against which the lower end of said bar is set, an abutment secured to said door, a key-controlled bolt also secured to said door said bolt having laterally-projecting walls between which the upper end of the bar is adapted to rest, whereby when the bolt is thrown the bar will be positively moved by said bolt into or out of engagement with the abutment on the door.

In witness whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EMIEL R. FUCHS.

Witnesses:

ROBERT W. ASHLEY,  
CHARLES S. JONES.