No. 832,420. PATENTED OCT. 2, 1906.

E. S. RINALDY.

DOOR CHECK.

APPLICATION FILED OCT. 31, 1905.

Fig. 1.

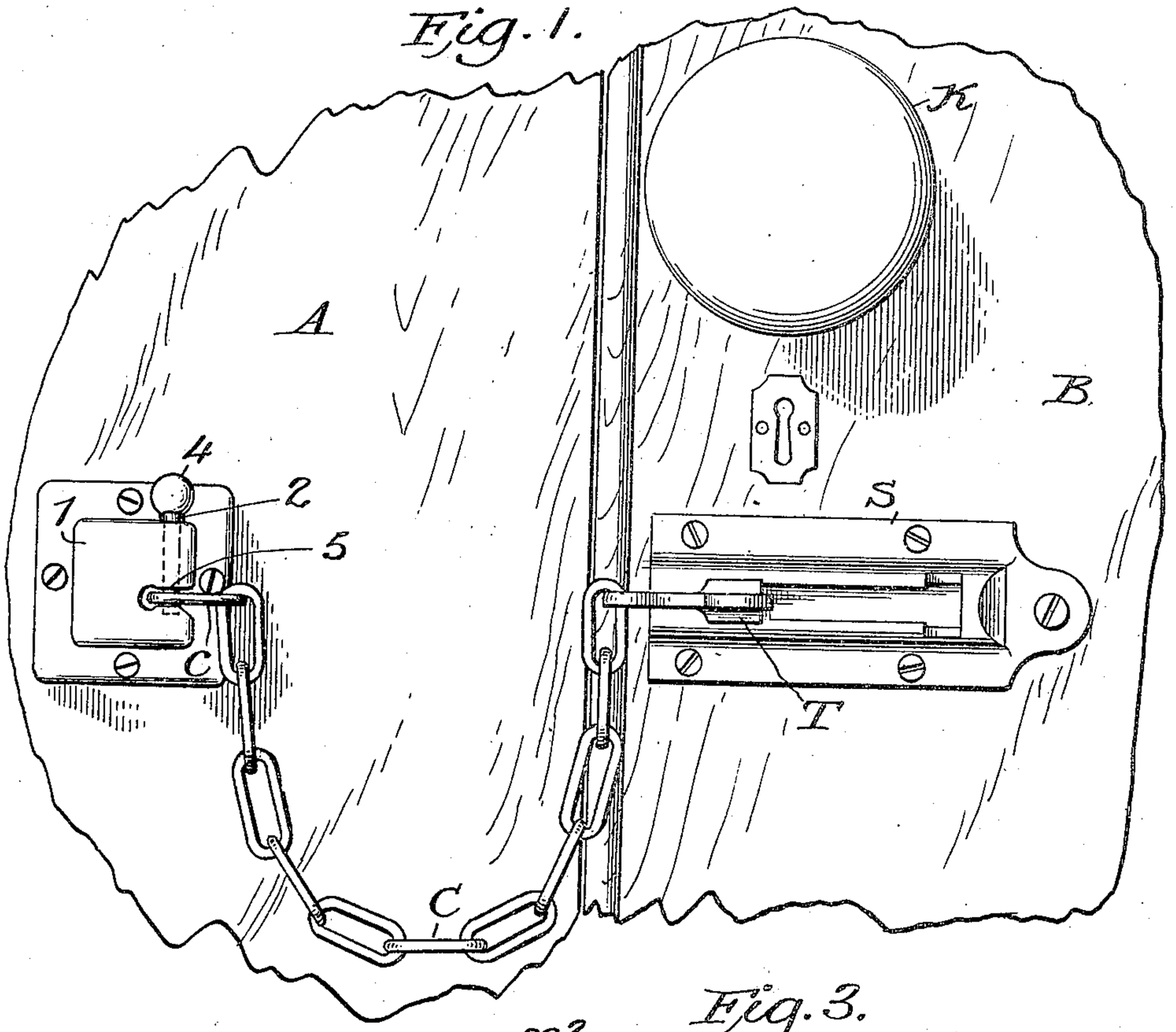


Fig. 2.

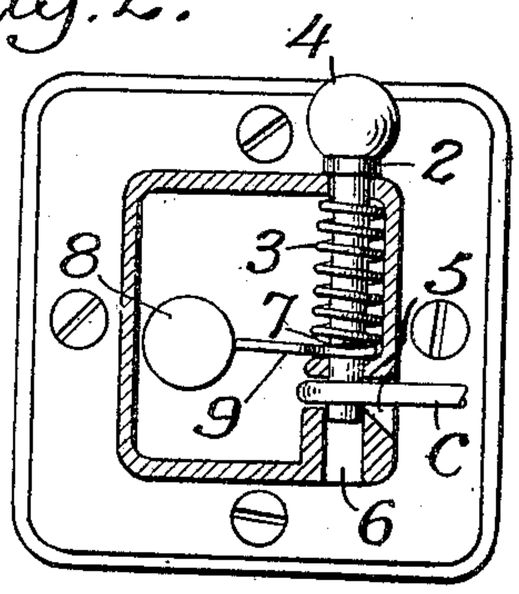
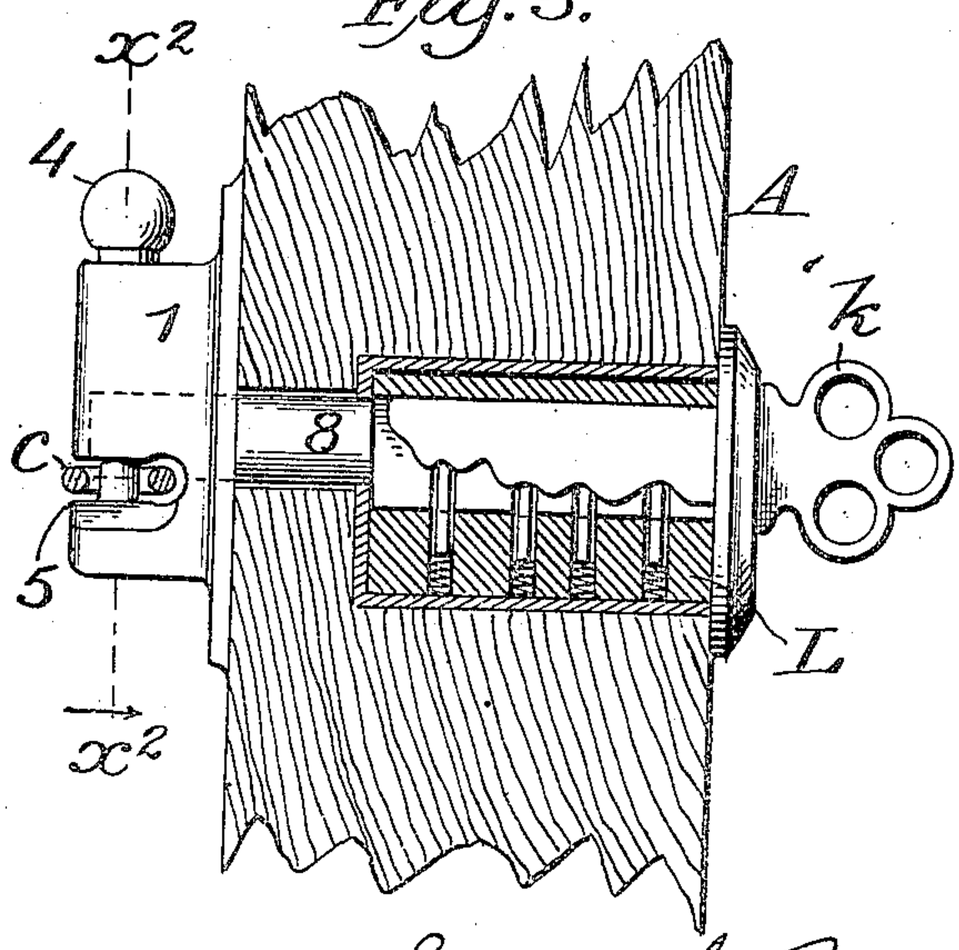


Fig. 3.



Witnesses

James F. Duhamel

Edward S. Rinaldy

Inventor

By his Attorney Henry Orrick

UNITED STATES PATENT OFFICE.

EDWARD S. RINALDY, OF NEW YORK, N. Y.

DOOR-CHECK.

No. 832,420. Specification of Letters Patent. Patented Oct. 2, 1906.

Application filed October 31, 1905. Serial No. 285,303.

To all whom it may concern:

Be it known that I, EDWARD S. RINALDY, a citizen of the United States, residing in the borough of Brooklyn, in the county of Kings and city and State of New York, have invented certain new and useful Improvements in Door-Checks, of which the following is a specification.

The ordinary door-chain in common use in city houses usually consists of a short chain secured by a staple to the bolted or fixed door of double doors and provided at its free end with a T-piece which may be made to engage a slotted metal socket secured to the other door which is used for admission. When the chain is in use, the last-named door may be opened a little way, but not to an extent sufficient to admit any one. It sometimes happens that the chain is inadvertently put up at night when a person having a latch-key is out, and it is desirable that he should be able with his latch-key or with another key to detach the chain, and thus gain admission.

The present invention has for its object to provide for such a contingency, and it consists, in substance, in substituting for the usual staple to which the fixed end of the chain is secured a bolt which secures the chain and a lock whereby through the aid of a key this bolt may be so moved as to detach the chain and permit it to fall free. Any suitable kind of lock and key may be employed, and it is preferred that the bolt shall have a spring to hold it in its operative position. It is also desirable that the bolt shall have a knob or the like whereby it can be drawn back or out by hand by any one inside the house for replacing the chain after its release. Devices for effecting this object have been employed or proposed, but so far as I am aware they have required a special construction of all the parts. My object is to accomplish the purpose with the ordinary door-chain and slotted socket which are kept in stock by dealers and to combine with this a special detaching means for that end of the chain which is usually secured, the device or means for detaching being a bolt and the parts so disposed that the chain will fall free by gravity when said bolt is withdrawn.

In the accompanying drawings, which illustrate an embodiment of the invention, Figure 1 is a view of the device on the doors as seen from inside the house. This view shows only a part of each door. Fig. 2 is a sectional view of the locking device on a larger scale than Fig. 1, the plane of the section being indicated by line x^2 in Fig. 3. Fig. 3 is a section taken through the door, and lock.

A designates what may be called the "fixed" door, which is usually bolted at top and bottom, and B the admission-door, or that which carries the knob K and the door-latch. C is the chain, and S the slotted socket which receives the T-piece T on the chain. These may all be of the usual kind.

On the inner face of the fixed door A at the proper point is mounted a bolt-casing 1, in which is mounted a bolt 2, provided with a spring 3 and a head or knob 4 on its exterior end. There is a slot 5 in the bolt-casing for the insertion of the end link *c* of the chain and a socket 6 to engage the end of the bolt after it shall have passed through said link. Pins 7 in the bolt take under the lower end of the spring 3.

Obviously the bolt may be withdrawn from its socket 6 and the chain be released by means of the knob or other thumb-piece 4 thereon; but this can be done only by a person inside the house. It must be understood that the thumb-piece 4, or, indeed, any other means for withdrawing the bolt 2 by hand, is not at all essential to the invention.

In order to enable any one outside to withdraw the bolt and release the chain, a lock L, Fig. 3, is set in the door with access for a key *k* from the outside, and this lock has a spindle 8, rotatable by the proper key. This spindle projects through the door into the bolt-casing 1, where it is provided with an arm 9, which is forked to embrace the bolt 2 and take under the pins 7. By means of this arm the rotation of the lock-spindle is caused to withdraw the bolt and release the chain. The bolt-spring 3 returns the arm and spindle to their normal position when the rotative power applied to the key *k* is removed.

Obviously the present invention is not restricted to any special form of lock. That herein shown is of the "Yale" type. So long as the construction provides an intermediary between the key and the bolt 2, whereby the former is enabled to withdraw the latter, the required conditions will be fulfilled.

As herein shown, the bolt-casing and bolt are so disposed that the bolt is displaced or withdrawn by an upward movement; but this is not very important. Obviously the

case may be so set that the withdrawal movement of the bolt is downward, horizontal, or inclined. The only essential is that the case shall be so set that the weight of the chain will withdraw the link *c* from the slot 5 in the bolt-casing when the bolt is withdrawn. The lock L and the latch of the door may be so constructed that one key will serve for both, but this is not necessary. The door may have the ordinary latch and key and the chain-lock L be provided with a special key.

Having thus described my invention, I claim—

1. The combination with a chain and slotted socket, of a bolt-casing provided with a sliding bolt in position to engage the end link of the chain, the casing having a flared slot to receive said link, a lock provided with means for withdrawing said bolt and releasing said link, and the key of said lock, adapted to actuate said bolt-withdrawing means.

2. The combination, with the fixed slotted socket S, and the chain C, provided at one end with a T-piece which slidably engages said socket, of the fixed bolt-casing 1, having in it a flared slot 5, the spring-bolt 2, mounted in said casing and adapted to engage the terminal link *c* of the chain, a fixed lock adjacent to the casing 1 and provided with a mechanism for withdrawing said bolt 2, and a key for operating the lock mechanism.

In witness whereof I have hereunto signed my name, this 26th day of October, 1905, in the presence of two subscribing witnesses.

EDWARD S. RINALDY.

Witnesses:
WILLIAM J. FIRTH,
H. G. HOSE.