

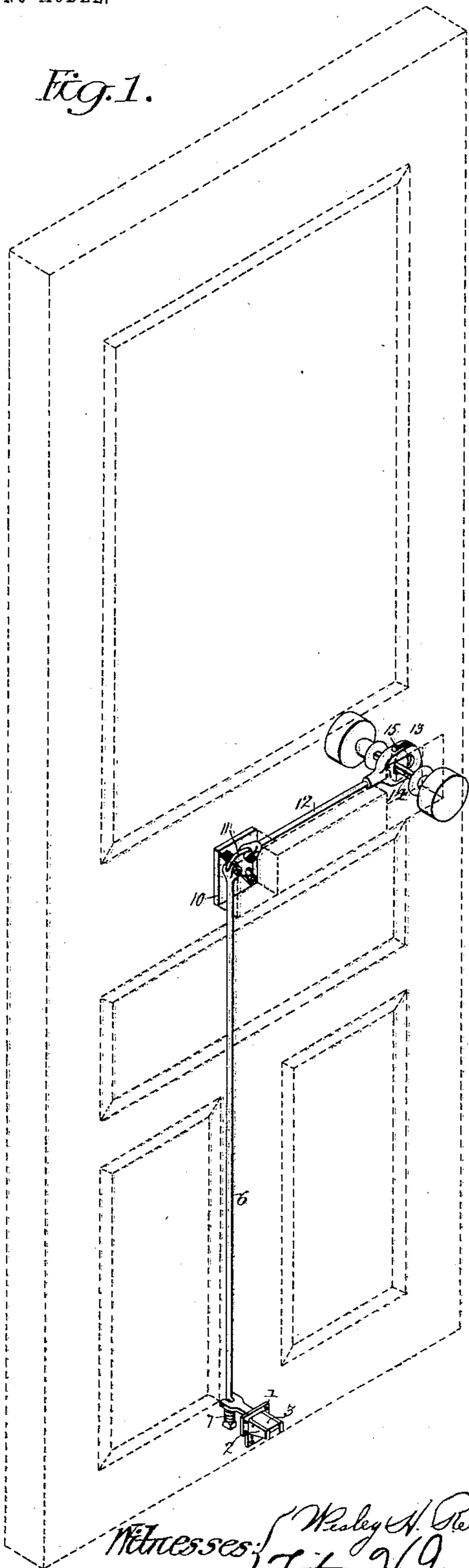
No. 771,726.

PATENTED OCT. 4, 1904.

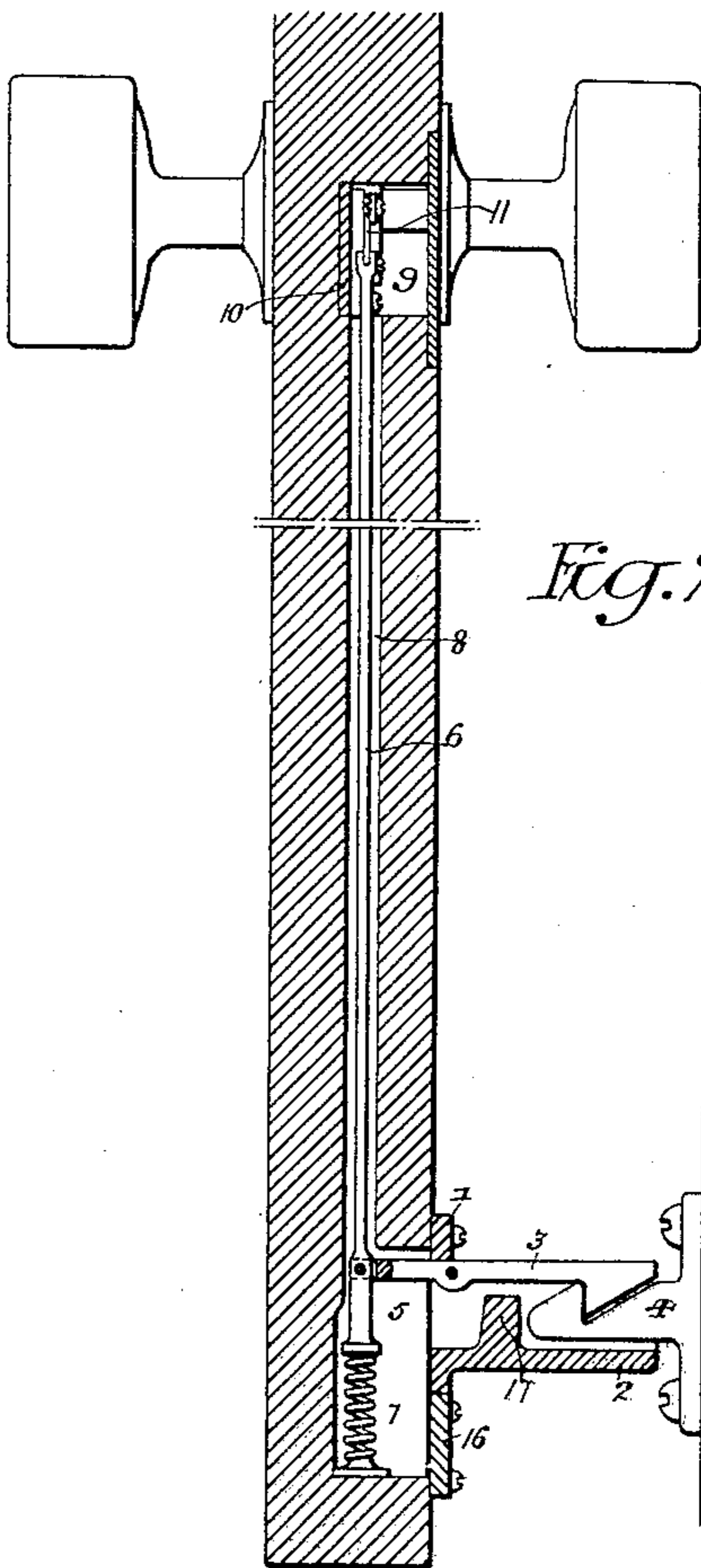
H. F. GOOD.  
DOOR RETAINER.  
APPLICATION FILED MAY 6, 1904.

NO MODEL.

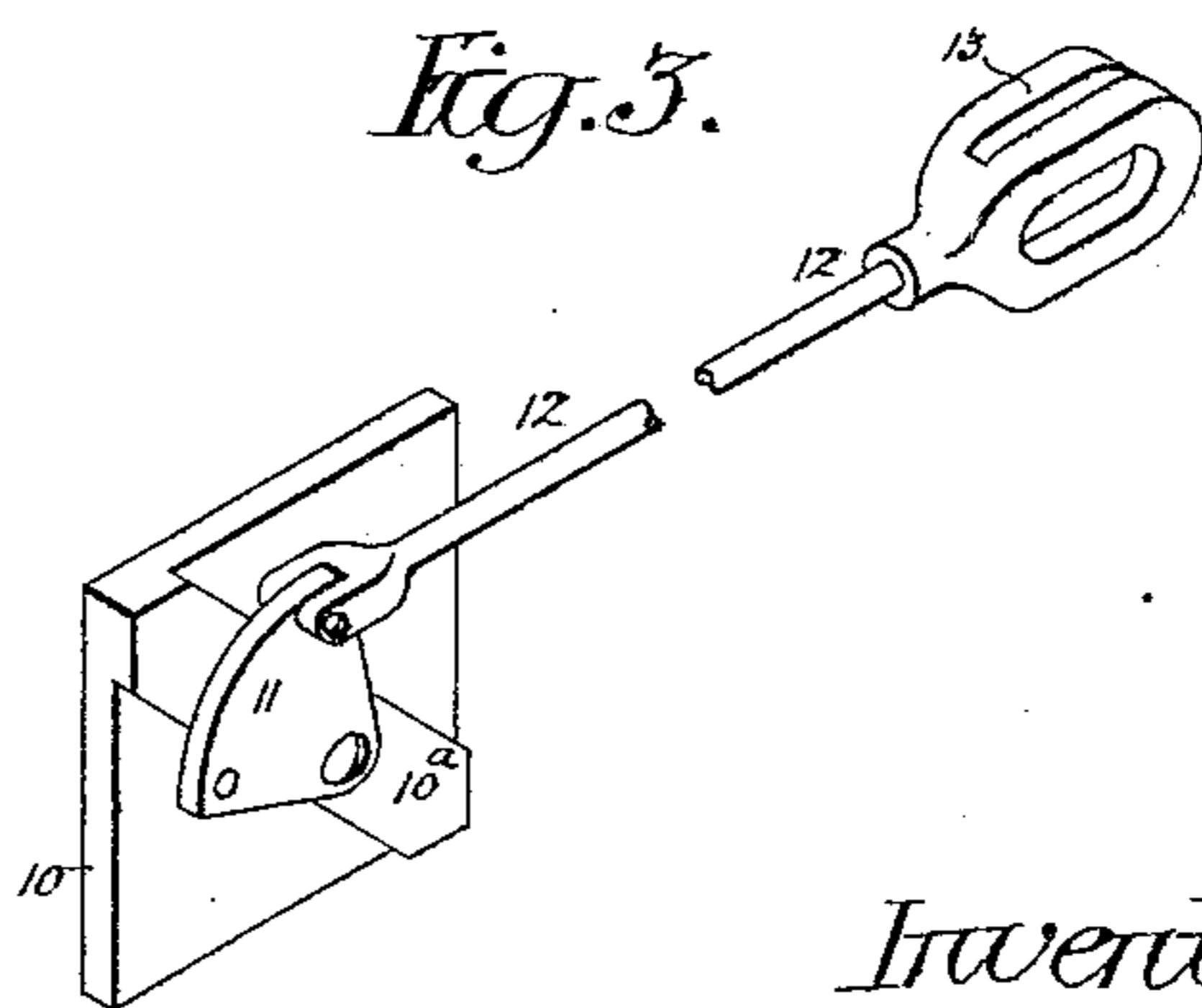
*Fig. 1.*



Witnesses: *Walter A. Paul.*  
*John A. Good.*



*Fig. 2.*



*Fig. 3.*

Inventor  
Herbert F. Good.  
by his Attorneys,  
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# UNITED STATES PATENT OFFICE.

HERBERT F. GOOD, OF PHILADELPHIA, PENNSYLVANIA.

## DOOR-RETAINER.

SPECIFICATION forming part of Letters Patent No. 771,726, dated October 4, 1904.

Application filed May 6, 1904. Serial No. 206,705. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT F. GOOD, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain

Improvements in Door-Retainers, of which the following is a specification.

My invention relates to that class of door catches or retainers which can be released by a movement of the door-knob, the object of my invention being to construct a simple, cheap, and durable connection between the knob-spindle and the catch which will permit of the location of said catch on any desired portion of the door.

In the accompanying drawings, Figure 1 is a perspective view of a door provided with a catch or retainer and operating mechanism therefor in accordance with my invention, the door being shown by dotted lines. Fig. 2 is an enlarged section of part of the door, showing the catch or retainer and its operating mechanism partly in section and partly in elevation; and Fig. 3 is a perspective view, on a larger scale than Fig. 1, of part of the mechanism there shown.

The door catch or retainer comprises a plate 1, secured to the face of the door and having a projecting casing 2, the top member of which consists of a pivoted and swinging catch-lever 3, which is adapted to engage with the hook 4, as shown in Fig. 2, so as to retain the door in the open position. The plate 1 closes the upper portion of a recess 5 in the face of the door, and the inner end of the catch-lever 3 projects into this recess and is forked, so as to embrace a vertical rod 6, with which the lever has suitable pivotal connection, the lower end of said rod 6 being acted upon by upwardly-pressing coiled spring 7, which therefore has the effect of depressing the hooked forward end of the catch-lever 3 into engagement with the fixed hook 4. The lower portion of the recess 5, which contains the spring 7, is closed by a plate 16, so that access to said spring is permitted without the necessity of removing the plate 1 and its casing 2 or breaking the connection between the rod 6 and catch-lever 3. The rod 6 passes through a vertical channel 8 in the door, and its upper end projects into a chamber 9, to the base of which is secured a plate

10, having a cross-bar 10<sup>a</sup>, which carries the pivot for a bell-crank lever 11, one arm of the latter being pivotally connected to the forked upper end of the rod 6 and its other arm being pivotally connected to the forked inner end of a bar 12, which projects into the chamber containing the door-lock and is there provided with an enlarged forked and slotted end 13, the slot being intended for the reception of the knob-spindle 14, which has upon it a cam 15, contained between the opposite limbs of the forked head 13, so that upon movement of the knob-spindle 14 in either direction the bar 12 will be pushed inwardly and will therefore, through the medium of the lever 11, cause a downward thrust upon the rod 6 and a lift of the outer hooked end of the catch-lever 3, so as to release the same from the hook 4.

Projecting upwardly from the base of the casing 2 is a lug 17, which by contact with the end of the hook 4 limits the extent of projection of the latter into the casing and prevents forcible contact of the end of the casing with the plate from which said hook 4 projects.

By locating all of the connecting mechanism between the catch or retainer and the lock-spindle within chambers or passages formed in the door said mechanism is both hidden from view and protected from injury or accident. Hence it does not render the door unsightly in appearance and it cannot be tampered with by mischievous or malicious persons.

The mounting of the lever 11 upon a metal plate 10 at the base of the recess containing said lever provides for a much firmer support of the lever than will be afforded by a simple wood-screw and prevents the loosening or other derangement of the lever-pivot which would interfere with the proper operation of the parts of the device.

The retaining catch-lever 3 can be located either at the top or bottom of the door or at any point intermediate of the top and bottom, depending upon the most convenient point for the location of the retaining-hook 4.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. The combination of a door having a knob-

spindle, and a projecting catch-lever or re-  
tainer, a casing projecting from the face of  
the door and carrying a pivot for said lever,  
and connecting mechanism between the said  
5 knob-spindle and catch-lever, substantially as  
specified.

2. The combination of a door having a knob-  
spindle with cam thereon, and a projecting  
catch-lever or retainer, connecting mechanism  
10 having as an element a forked rod embracing  
the knob-spindle and engaging the cam there-  
on, and a spring acting upon one of the ele-  
ments of the mechanism to move the catch-le-  
ver to retaining position and to retain the  
15 forked rod in engagement with the cam on the  
knob-spindle, substantially as specified.

3. The combination of a door having a knob-  
spindle and a projecting catch-lever, connect-  
ing mechanism between said spindle and lever  
20 contained in inclosed chambers or passages of  
the door, and a plate located at the base of one  
of said chambers in the door, and carrying the

pivot for a lever constituting one of the ele-  
ments of said connecting mechanism, substan-  
tially as specified. 25

4. The combination of a door having a knob-  
spindle and a projecting catch-lever, connect-  
ing mechanism between said spindle and catch-  
lever contained in inclosed chambers or pas-  
sages of the door, a spring acting upon said 30  
connecting mechanism, a plate carrying said  
catch-lever and partially closing one of the  
chambers of the door, and a supplementary  
plate closing that portion of said chamber  
which contains said spring, substantially as 35  
specified.

In testimony whereof I have signed my name  
to this specification in the presence of two sub-  
scribing witnesses.

HERBERT F. GOOD.

Witnesses:

JAMES McMORRIS,  
JOS. H. KLEIN.