

No. 661,446.

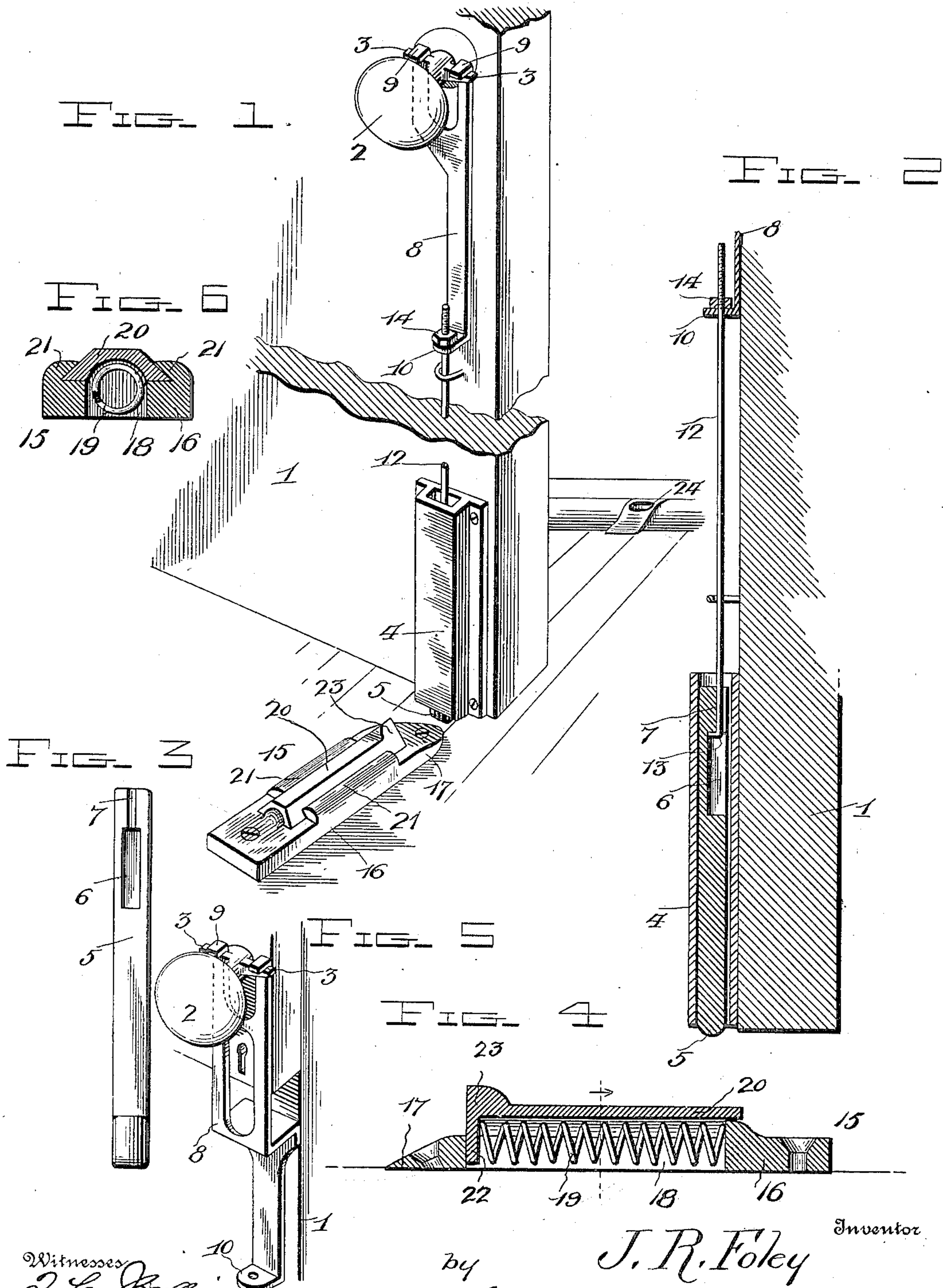
Patented Nov. 6, 1900.

J. R. FOLEY.

DOOR STOP.

(Application filed Mar. 23, 1900.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES R. FOLEY, OF MOUNT CRAWFORD, VIRGINIA.

DOOR-STOP.

SPECIFICATION forming part of Letters Patent No. 661,446, dated November 6, 1900.

Application filed March 23, 1900. Serial No. 9,908. (No model.)

To all whom it may concern:

Be it known that I, JAMES R. FOLEY, a citizen of the United States, residing at Mount Crawford, in the county of Rockingham and State of Virginia, have invented certain new and useful Improvements in Door-Stops; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention has relation to door-stops.

The object of the invention is to provide a stop which is controlled by the door-knob and which will hold the door in any desired position, open or closed.

With this object in view the invention consists in certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view illustrating my invention applied to a door and showing the catch device secured to the floor. Fig. 2 is a vertical sectional view through a portion of the door, the bolt-casing, the bolt, and the connecting-rod. Fig. 3 is a plan view of the bolt. Fig. 4 is a longitudinal sectional view through the catch. Fig. 5 is an enlarged detail perspective view of a modified form of bifurcated plate especially designed for use with doors provided with exposed lock-casings. Fig. 6 is a cross-sectional view through Fig. 4.

In the drawings like characters of reference indicate like parts in all the figures.

1 denotes the door, 2 its knob, and 3 arms projecting laterally from said knob.

4 denotes a bolt-casing secured to the lower end of the door, and 5 a bolt having a sliding movement within said casing. The inner face of this bolt is provided with a deep recess 6, which communicates with a longitudinal groove 7.

8 denotes a plate having a bifurcated upper end formed with lugs 9, adapted to be engaged by the arms of the knob, so that in the rotation of the knob in either direction said plate will be lifted. The lower end of this plate is provided with a laterally-extending ear 10, formed with an aperture 11.

12 denotes the connecting-rod, the lower end of which is bent, as shown at 13, and lies within the recess 6, while the straight portion

extends upwardly through the groove 7 in the bolt and has its upper end screw-threaded and passed through the aperture in the ear 10 and provided with an adjusting-nut 14.

15 denotes the catch, consisting of a base 16, having an inclined forward edge 17. The base is provided with longitudinal slot 18, within which is arranged a coil-spring 19.

20 denotes a buffer-plate, which has a sliding engagement between ledges 21 on the base and is provided with a downwardly-extending tongue 22, that engages the forward end of the coil-spring, and an upwardly-extending edge or shoulder 23, which is adapted to be engaged by the bolt.

If desired, a socket-plate 24 may be secured in the sill of the door-frame to receive the bolt when the door is closed.

In operation to remove the bolt from the socket-plate the door-knob is turned. This elevates the bolt from the socket-plate. The door is now swung open, and as the bolt strikes the inclined end of the catch-plate it will yield upwardly and in coming in contact with the upwardly-extending head of the door-plate will force the buffer-plate rearward against the action of the spring until sufficient opening is made between the buffer-plate and the end of the casing to permit the bolt to drop therein. When the bolt falls into this opening, it is firmly held in place by the force of the spring, thus preventing any rattling or movement of the door.

It will be noticed that by loosely connecting the rod with the bolt and with the plate 8 after the bolt has been removed from the socket-plate the door-knob may be released and said plate allowed to lower and the door swing wide open and engage itself with the catch. If this construction were not provided, it would be necessary for a person to retain his grasp upon the door-knob in order to hold the bolt elevated to engage the catch-plate. Should the bolt become worn, this wear may be compensated for by unscrewing the nut at the end of the connecting-rod and lowering the bolt.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. The combination with the bolt-casing adapted to be secured to a door, of a vertical

bolt located in said casing, and a stop-plate provided with an inclined edge and with a spring-actuated buffer-plate adapted to be engaged and be depressed by said bolt and to
5 lock said bolt in said catch-plate, substantially as and for the purpose set forth.

2. The combination with the bolt-casing adapted to be secured to a door, a bolt having a recess in its side, and a groove communicating with said recess, a plate adapted to
10 be connected to the door-knob and be elevated thereby, and a connecting-rod the lower end of which is located within the recess of said bolt and extends through the groove in said
15 bolt and the upper end of which is adjustably

connected to the plate, substantially as and for the purpose set forth.

3. A stop-plate provided with an inclined end and a longitudinal recess, a spring located in said recess, and a buffer-plate having a longitudinal sliding engagement with the stop-plate and actuated by said spring, substantially as and for the purpose set forth. 20

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. 25

JAMES R. FOLEY.

Witnesses:

GEO. W. HESS,

D. H. LEE MARTZ.