

C. SCHNEIDER.

DOOR STOP.

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903,409.

Patented Nov. 10, 1908.

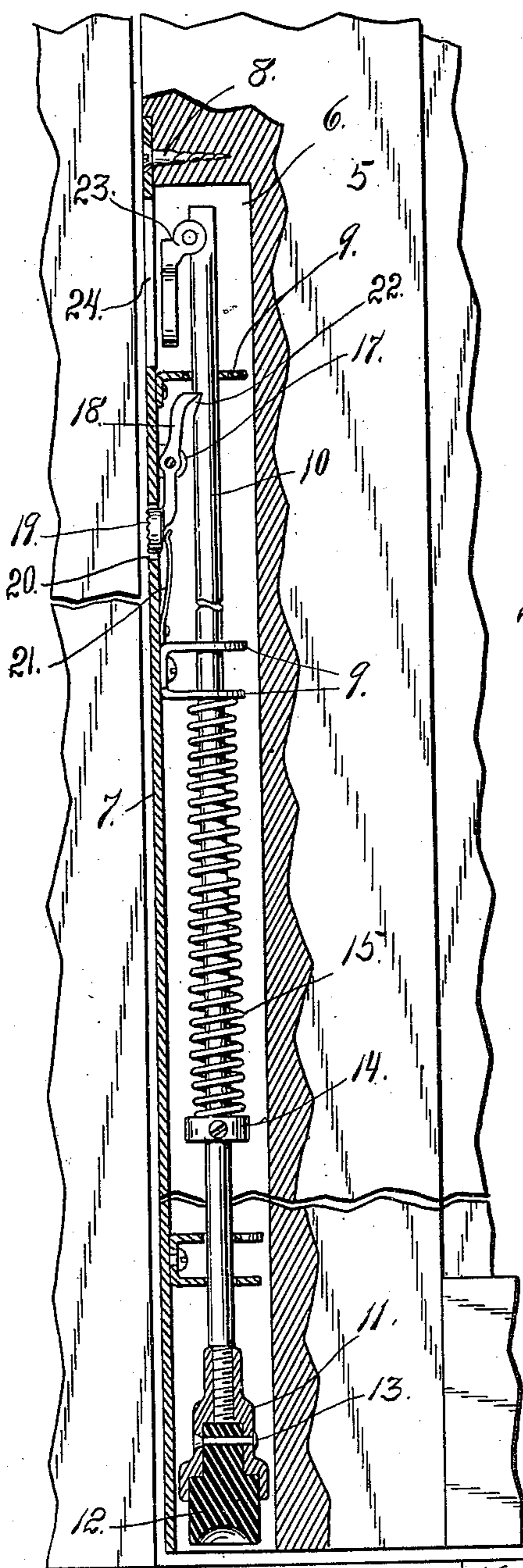


Fig. 1.

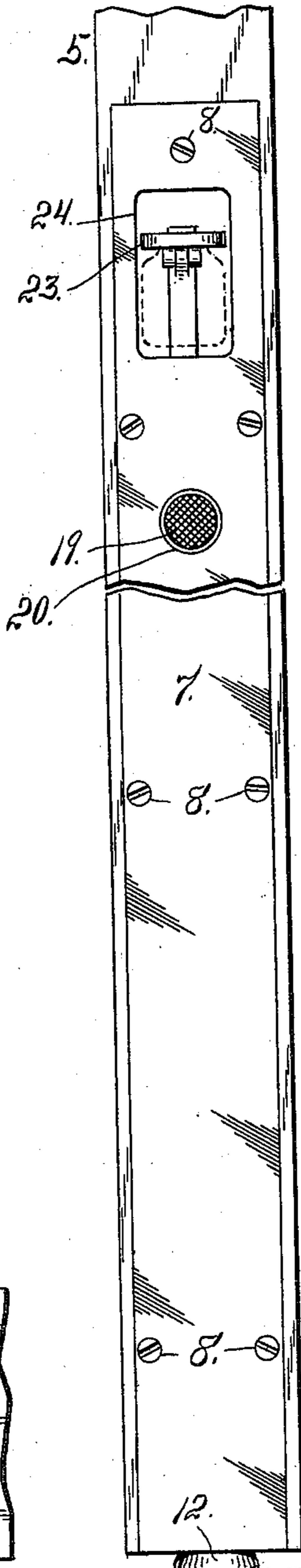


Fig. 2.

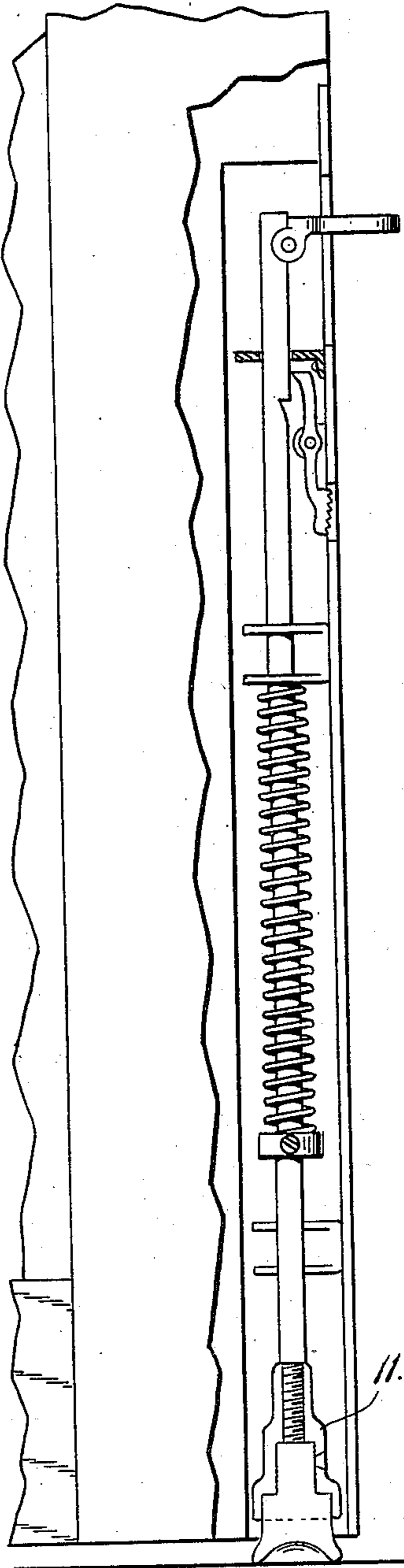


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

CHRISTOPH SCHNEIDER, OF BOULDER, COLORADO.

DOOR-STOP.

No. 903,409.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHRISTOPH SCHNEIDER, a citizen of the United States, residing at Boulder, in the county of Boulder and State of Colorado, 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in door stops, my object being to provide an equipment for the doors of buildings, whereby the doors when open may be held in any desired position and are not liable to be accidentally closed or swung more widely open, by the wind or other agency.

My further object is to equip doors with a device of the character aforesaid, in such a manner that the said device will be entirely concealed within the jamb of the door; and to this end, I form a mortise or recess within the door jamb and place within the said recess a spring-actuated rod, vertically movable in suitable guides. The lower or stop extremity of the rod is equipped with a yielding plug preferably composed of rubber to prevent the marring of the floor or injury to carpets or rugs. The door is also provided with a spring-actuated pawl adapted to support the stop in the raised position or in a position whereby its lower extremity shall be raised from the floor or other surface.

Having briefly outlined my improved device, I will proceed to describe the same in detail reference being made to the accompanying drawing in which is illustrated an embodiment thereof.

In this drawing, Figure 1 is a sectional view of the door jamb showing my improved door stop in place, the same being raised to prevent it from coming in contact with the floor or other surface above which the door swings. Fig. 2 is a face view of the door jamb showing the device lowered to form a stop. In Fig. 2 the door occupies a position at right angles to Fig. 1. Fig. 3 is a view similar to Fig. 1 but viewed from the opposite side of the door, the door stop being lowered to engage the floor or other surface.

The same reference characters indicate the same parts in all the views.

Let the numeral 5 designate a door in the jamb of which is formed a mortise 6. This mortise is closed on the outside or face of the jamb by a plate 7 which is held in place by screws 8. This plate is equipped with horizontally disposed apertured guides 9 which protrude into the mortise. Passing through the openings in these guides is a rod 10 whose lower extremity is equipped with a shoe 11. As shown in the drawing the upper extremity of this shoe is provided with a socket into which the lower extremity of the rod is threaded. This shoe is also formed hollow and open at the bottom to receive a yielding stop 12 preferably formed of india rubber. This stop may be held in place by means of a rivet 13 or other suitable fastening device. Between one of the guides 9 and a stop collar 14 attached to the rod, is a coil spring 15 which is under sufficient tension, to hold the stop 12 against the floor 16 or other surface with sufficient force to hold the door in the desired position of opening adjustment under ordinary circumstances. If great force, however, is applied to the door the stop will allow it to move without breaking. This stop is only intended to cause the door to resist ordinary strains or forces.

Pivotally mounted on a lug 17 formed on the inner surface of the face plate 7, is a locking pawl 18 whose lower extremity is equipped with a button 19 protruding through an opening 20 formed in the face plate. This button extremity of the pawl is normally held in its outer position by means of a leaf spring 21. The upper extremity of this dog is adapted to engage a notch or recess 22 formed in the rod 10, when the latter is raised to cause the stop 12 to clear the floor. When it is desired to release the stop, it is only necessary to press inwardly on the button extremity 19 of the pawl, in which event its opposite extremity is disengaged from the recess 22, allowing the rod to move downwardly under the influence of the spring 16, whereby the stop is caused to engage the floor with sufficient force to accomplish the object of the invention.

To the upper extremity of the rod 7, is pivotally connected a small plate 23 which normally occupies a position concealed within the mortise 6. The face plate, however,

is provided with an opening 24 to allow the plate 23 to be swung outwardly to the position shown in full lines in Figs. 2 and 3. This plate when swung to the position 5 shown in the last named views, allows the operator to readily lift the rod 10, whereby the latter is raised to cause the stop to clear the floor and at the same time allow the pawl 18 to engage the recess of the rod to 10 support the latter in the desired position.

Having thus described my invention, what I claim is:

1. The combination with a door provided with a mortise jamb, of a face plate applied 15 to the lower jamb and equipped with horizontally disposed guide plates which protrude into the mortise, a rod slidably mounted in said guide plates, a spring under tension to move said rod downwardly, the lower 20 extremity of the rod being provided with a yielding stop, and a spring actuated pawl mounted on the face plate and exposed through an opening formed in the latter for operating purposes, said pawl supporting 25 the rod in position to disengage its stop from the floor, substantially as described.

2. The combination with a door provided with a mortise formed in its jamb, a face 30 plate applied to the jamb of the door to close said mortise on the outside, the said

face plate being equipped with apertured guides, a spring-actuated rod located in the mortise and engaging said guides, a stop connected with the lower extremity of the rod, a lifting arm connected with its upper 35 extremity, and a spring-actuated locking pawl mounted on the face plate and adapted to engage a recess formed in the rod, the said pawl being provided at one extremity with a button normally entering an opening 40 formed in the said face plate, making the pawl accessible for the purpose of releasing the rod, substantially as described.

3. The combination with a door, of guides mounted thereon, a vertically disposed 45 spring-actuated rod movable in the guides, the lower extremity of the rod being provided with a yielding stop, and its upper extremity with a lifting device, and suitable means operated by a button normally enter- 50 ing an opening formed in the face plate for supporting the rod in position to raise the stopper above the floor or other surface, substantially as described.

In testimony whereof I affix my signature 55 in presence of two witnesses.

CHRISTOPH SCHNEIDER.

Witnesses:

DENA NELSON,
MAY GAWLEY.