

UNITED STATES PATENT OFFICE.

HERMAN V. WERTZBERGER, OF GLENWOOD SPRINGS, COLORADO.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 528,049, dated October 23, 1894.

Application filed February 27, 1894. Serial No. 501,662. (No model.)

To all whom it may concern:

Be it known that I, HERMAN V. WERTZBERGER, of Glenwood Springs, in the county of Garfield and State of Colorado, have invented certain new and useful Improvements in Door-Checks; and I do hereby 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.

This invention contemplates certain new and useful improvements in door-checks, and has for its object the production of improved, simple and highly efficient means for holding a door or swinging window at any point in the arc of its intended movement, and which will act as a bumper against a wall or any vertical obstruction.

The invention comprises the novel features of construction, and also the combination and arrangement of parts, substantially as hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings:—Figure 1 is a vertical longitudinal sectional view of my improved door or window-check. Fig. 2 is a front elevation with parts removed and in section. Fig. 3 is a front elevation of the device as a whole. Fig. 4 is a top end view. Fig. 5 is a cross-sectional view on the line $x-x$, Fig. 2. Fig. 6 is a similar view on the line $y-y$, Fig. 2.

Referring to the drawings, A designates a frame which is designed to be rigidly secured to a door or window near the bottom thereof by means of nails or screws passed through holes a . From the front face of this frame project overhanging flanges a' and a stop or cross-piece a^2 at the upper end of said flanges. From about the center to the lower end of this frame A are two parallel rack-bars a^3 located within the space between the overhanging flanges.

B is an adjustable box or frame the sides of which have flanges b which fit snug beneath the overhanging flanges of the stationary frame on which said box or frame B is designed to be vertically adjustable. The upper end of this frame is extended to form a thumb-piece b' which upon coming in contact with stop a^2 limits the movement of the box or frame B. This latter is divided by a

horizontal partition b^2 into upper and lower compartments, the sides and top of the latter being extended outwardly beyond the former. In the upper chamber is a shaft C mounted in the sides of the box or frame and upon it are two gear-wheels d which are designed to intermesh with rack-bars a^3 of frame A, and between these gear wheels, preferably formed integral therewith, is a ratchet wheel d' . A pawl or lever D fulcrumed at d^2 is designed to engage this ratchet wheel d' , being so held in engagement by a spring d^3 secured at d^4 . The upper end of pawl or lever D is projected through a slot e in the front of box or frame B, which slot permits the pawl or lever to be turned on its fulcrum to free it from engagement with the ratchet-wheel. The lower chamber of box or frame B is open at its front and bottom and in it is mounted a roller E, whose shaft is supported by the sides of the box or frame. This roller is preferably made of vulcanized rubber, or other semi-pliable material, and its toothed periphery extends beyond the front and bottom of the box, its forward projection being beyond any other projecting portion of the device. Thus the roller will act as a bumper upon coming in contact with a wall or other vertical obstruction. The lower projecting portion is designed to bear against the floor or window-sill or ledge and by reason of the frictional contact will hold the door or window at any point within the arc of its intended movement. To adjust the roller and its holding box or frame the operator disengages the pawl or lever from contact with the ratchet-wheel and by grasping the thumb-piece the box can be moved up or down, the gear-wheels engaging the rack-bars of the stationary frame.

From what has been said it will be seen that I have produced a combined check and bumper for doors and swinging windows, which is simple in construction, inexpensive, and not liable to readily get out of order, and that the position of the friction-roller can be readily adjusted and held at any point, and that the same will serve as a bumper and protect the other parts of the device from injury upon contact with a wall or other obstruction.

I claim as my invention—

1. The herein-described improved door-

check, comprising the stationary frame having guide-ways and rack-bars, the box or frame movable in said guide-ways, the frictional roller carried by said box or frame, the gear-wheels engaging said rack-bars, and means for locking the same, substantially as set forth.

2. The herein-described improved door-check, comprising the stationary frame having guide-ways and rack-bars, the box or frame movable in said guide-ways and having a slot in its front wall, the frictional roller carried by said box or frame at its lower end, the gear-wheels engaging said rack-bars, the ratchet-wheel and the pawl or lever engaging said ratchet wheel and projected through said slot, substantially as set forth.

3. The herein-described improved door-check, comprising the frame having parallel overhanging flanges, an upper stop, and parallel rack-bars, the box or frame provided

with flanges fitting beneath said overhanging flange and having a slot in its front wall and open at its bottom and lower front end, the frictional roller projecting beyond the lower end of said box or frame, the shaft journaled in said box or frame, the gear-wheels mounted on said shaft engaging said rack-bars, the ratchet wheel also carried by said shaft, and the spring-pressed pawl or lever engaging said ratchet-wheel and projected through said slot in said box or frame, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HERMAN V. WERTZBERGER.

Witnesses:

JAS. R. HENDERSON,
THEO. S. SPIELMAN.