

(No Model.)

V. C. DILLMANN.  
DOOR CHECK.

No. 541,783.

Patented June 25, 1895.

Fig. 3

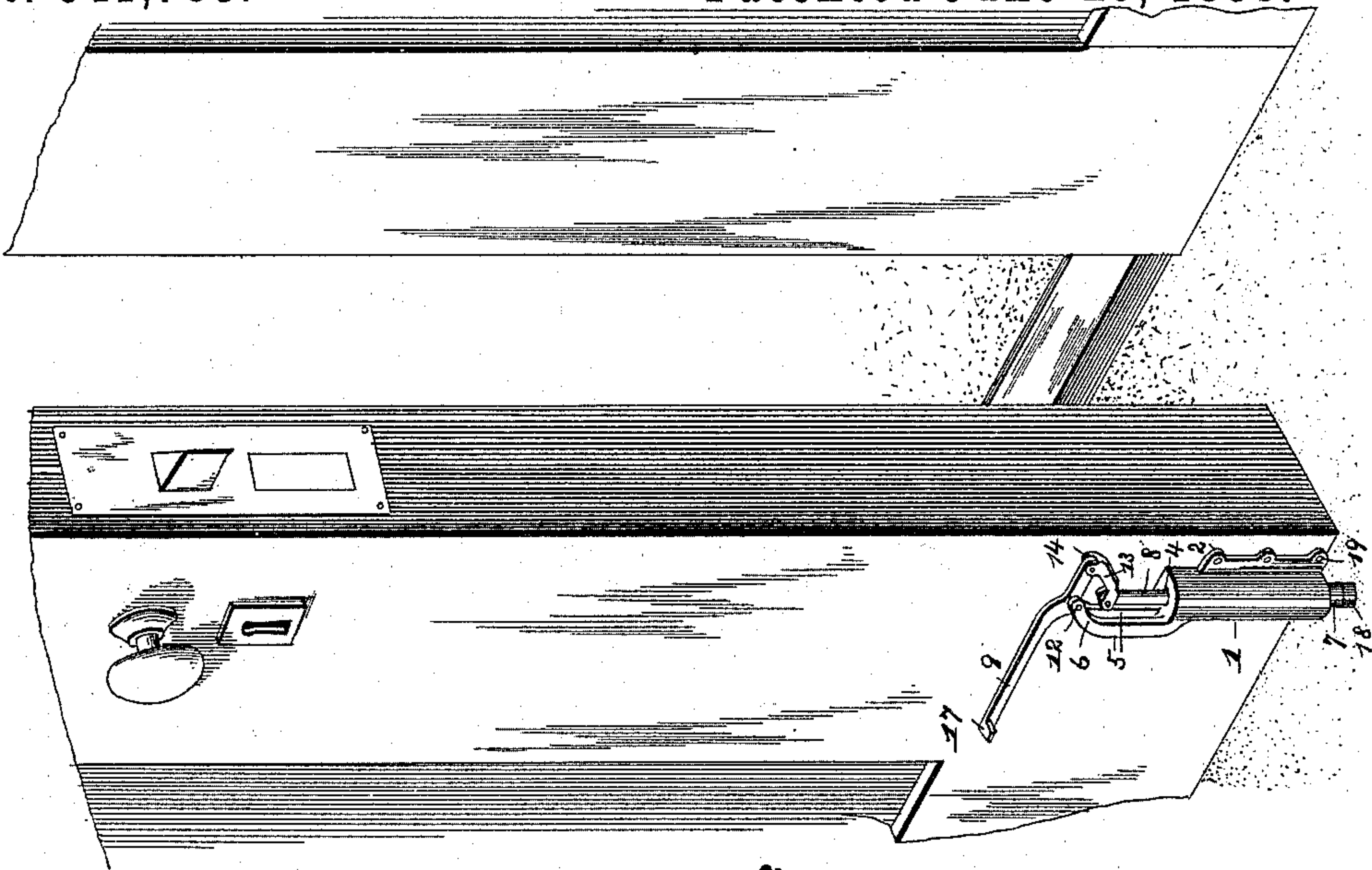


Fig. 2.

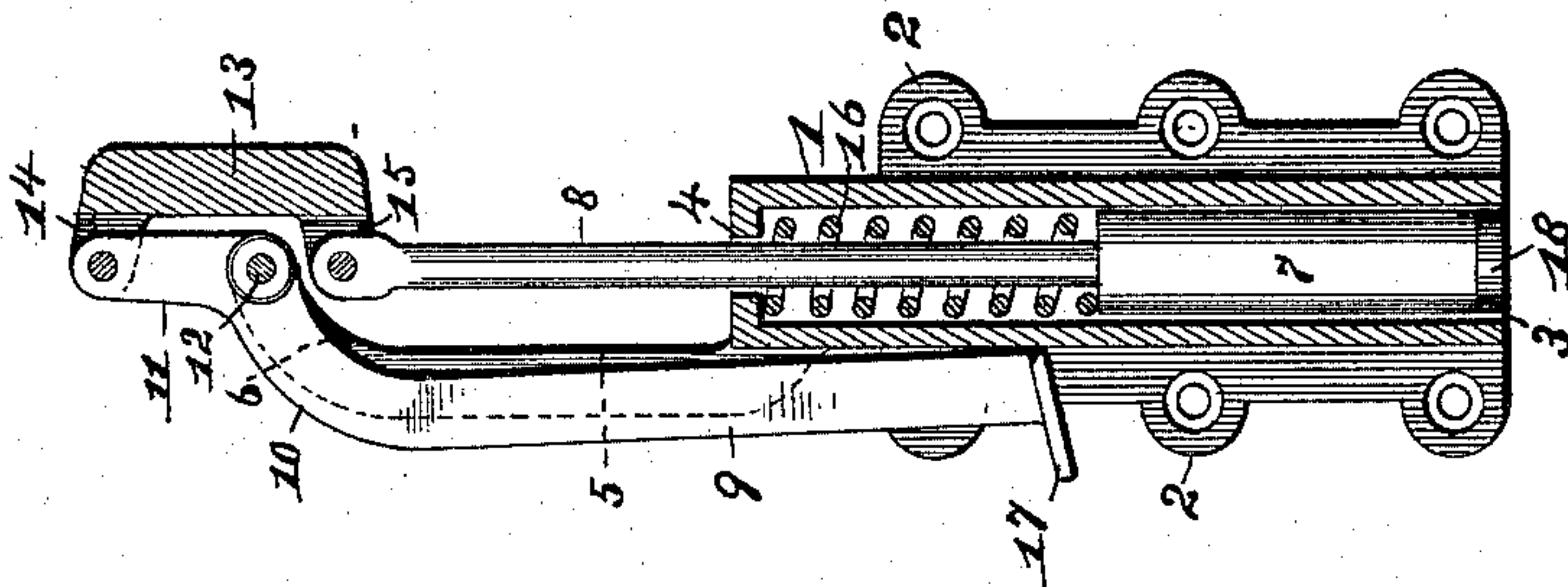
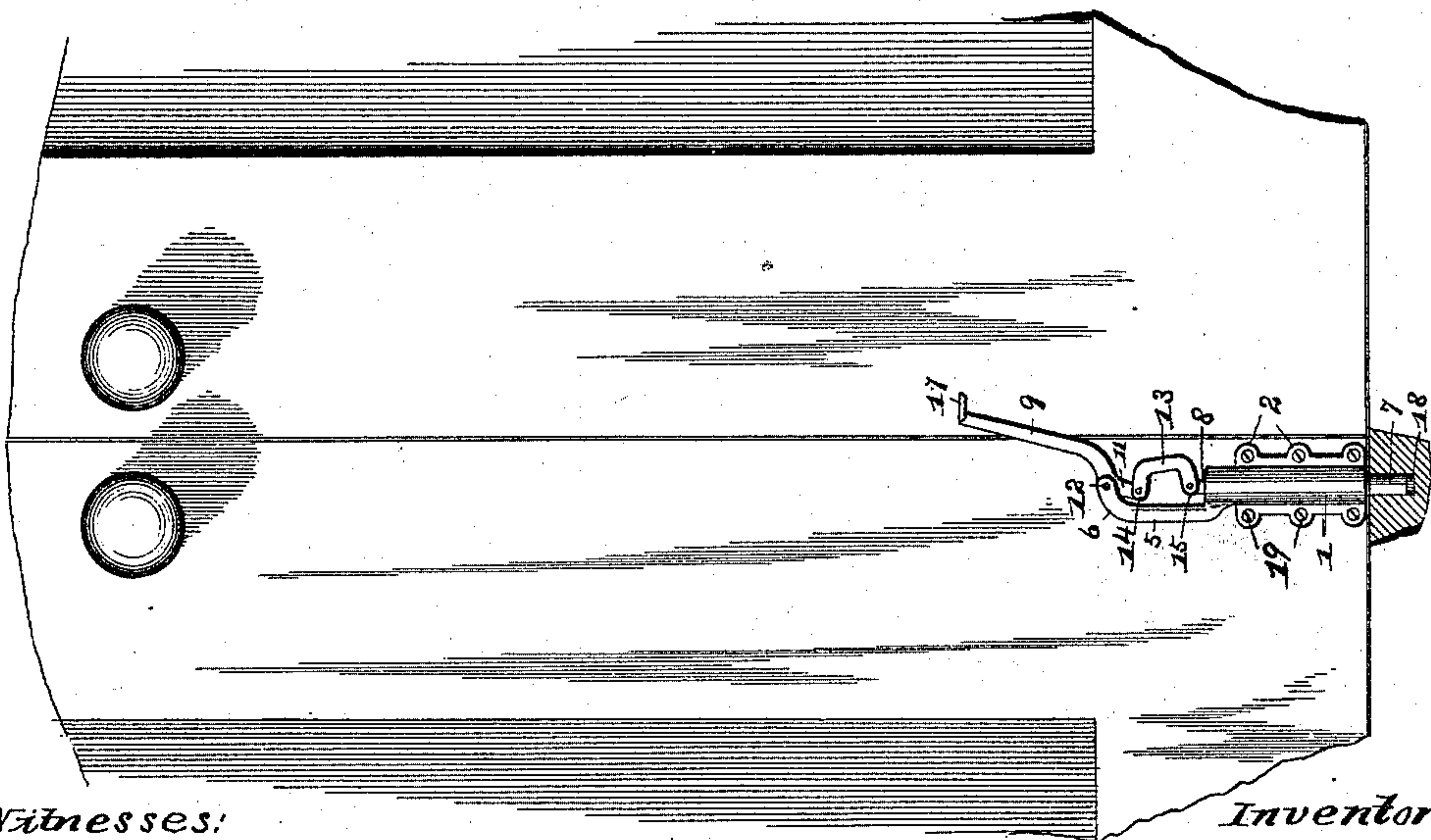


Fig. 1.



Witnesses:

*L. G. Fischer*  
*W. H. Thorpe*

Inventor

*Victor C. Dillmann*

By *Higdon & Higdon*  
Attys.



# UNITED STATES PATENT OFFICE.

VICTOR C. DILLMANN, OF KANSAS CITY, MISSOURI.

## DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 541,783, dated June 25, 1895.

Application filed September 8, 1894. Serial No. 522,456. (No model.)

*To all whom it may concern:*

Be it known that I, VICTOR C. DILLMANN, of Kansas City, Jackson county, Missouri, have invented certain new and useful Improvements in a Combined Door Check and Bolt, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to a combination of peculiarly constructed elements, the object of which is to securely fasten doors by bolting them to the floor or otherwise, when closed, or standing ajar, and a further object of my combination, is to securely hold the door at any desired point or position, while standing ajar, without marring or defacing the floor or injuring the carpet, and a still further object I have in view, is to produce a combination which shall be simple of construction, cheap in manufacturing, strong and durable, and easy of manipulation.

With these objects in view, the invention consists in certain novel and peculiar features of construction and combinations of parts, as will be hereinafter described and claimed.

In order that the invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 represents a face view of a pair of double doors and showing my device applied thereto in operative position. Fig. 2 is a vertical longitudinal section on an enlarged scale of the combined door check and bolt; and Fig. 3 is a perspective view of a single door partly opened, and showing my device applied thereto in operative position as a check to hold the door at any required point in its adjustment.

In the said drawings, 1 designates a barrel or casing, which may be angular externally in cross section, or may be cylindrical and formed with one flat side, as illustrated in the drawings, so as to be easily applicable to the face of a door, and projecting laterally from each side of said barrel or casing are the apertured ears or lugs 2, which occupy the plane of the flat side of the barrel or casing. The lower end of the barrel or casing is open, as shown at 3, while the upper end is provided centrally with the cylindrical passage 4.

Projecting vertically upward from the upper end and at one side of the barrel, are the

parallel arms 5—5, and these arms at their upper ends, are curved as shown at 6, to a point in the vertical plane of the center of said barrel or casing. The construction thus far described is preferably in the form of a single casting.

A cylindrical plunger bolt 7 fits snugly within the barrel or casing, and is provided with a cylindrical stem 8, of smaller diameter than said plunger, which extends through the passage 4 in the upper end of the barrel or casing. A lever is approximately of the form of the parallel arms 5, that is, it consists of a straight portion 9, and a curved portion 10. The said lever is also provided at the end of the curved portion with an arm 11, which extends approximately parallel with the portion 9. This lever, at the junction point of the curved portion 10 and the arm 11, is pivotally mounted upon a pin 12, carried by and connecting the curved portions of the arms 5, so that when in operative position the portion 9 of said lever fits snugly between the arms 5 and against the side of the barrel or casing, while the arm 11 extends in longitudinal alignment with the center of said barrel or casing.

An approximately U-shaped link consists of the straight portion 13 and the bifurcated arms 14 and 15, the arm 15 being pivotally connected to the upper end of the plunger-bolt stem, 8, and the arm 14 being pivotally connected to the end of the arm 11 of the lever. Spirally encircling the stem of the plunger bolt within the barrel casing, and bearing at its opposite ends against the shoulder formed at the junction of the plunger proper with its stem and against the upper closed end of said barrel or casing, is an expansion-spring 16, which exerts a constant and yielding pressure in the effort to cause the plunger bolt to project beyond the lower end of the casing.

It will be noticed that the pivotal point of connection between the curved portions of the arms 5 and the said lever is out of alignment with the pivotal points of connection between the link and the stem 8 and the arm 11, being slightly to the right, so that the direct pressure or pull exerted by the spring upon the stem cannot accidentally cause the pivotal operation of the said lever. In order that the



lever may be more easily operated, it is provided at its free end with an outwardly projecting lug 17, and the plunger bolt, to avoid any possible injury to the carpet or floor, carries at its lower end a rubber or other yielding friction surface 18.

Referring to Fig. 1, the combination will be seen applied in operative position to a pair of folding doors, with which it is used principally as a means of securing them from accidentally opening, and therefore performs the function of a bolt. When used for this purpose and also as a door-check, as illustrated in Fig. 3, it is secured vertically to the face of the door adjacent to its free vertical margin by means of the screws 19, or other suitable devices, which extend through the apertured ears 2. To secure the doors in their closed position, the lever is moved slightly by means of the hand, or by contact of the lug 17 with the foot if preferred, in the direction indicated by the arrow. Immediately the pivotal point of connection between the link and the arm 11 reaches a point to the right of the pivotal point of connection between the arms 5 and the said lever, the action of the spring upon the plunger forces the same vertically upward and into the socket or cavity formed in the floor to receive it, and causes the lever to swing to the position shown in dotted lines. To retract said bolt, it is necessary to apply pressure upon the outer end of the lever and overcome the resistance of the actuating spring, as will be understood.

A door provided with my improved combination may be opened and held at any desired point in its adjustment by the manipulation of the lever as first described, this ma-

nipulation causing the spring to force the rubber-tipped plunger bolt into frictional engagement with the carpet or floor of the room, so that while the plunger bolt is in this position the door cannot be accidentally closed. While I have shown this combination arranged only in a vertical position, it is manifest that it can be applied horizontally or at any angle to a horizontal position, and is equally susceptible of being applied as a door bolt for securely holding the door when closed.

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

The improved door-check, comprising a lever 9—10—11 which extends parallel with the face of the door, a suitable casing, two parallel arms 5—5 projecting vertically from the upper part of said casing and forming a slot or groove between themselves for the reception of said lever, said arms having curved upper ends 6 which overhang said casing, a plunger-bolt in said casing, a spring for projecting said bolt, and the U-shaped link 13—14—15 pivotally-connecting the upper end of said bolt to said lever, whereby when the said bolt is retracted said lever may be located in the slot between said parallel arms and the three pivotal-points of said lever and said U-shaped link will then be located in substantially vertical-alignment, as specified.

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

VICTOR C. DILLMANN.

Witnesses:

E. H. TEVIS,  
M. R. REMLEY.