

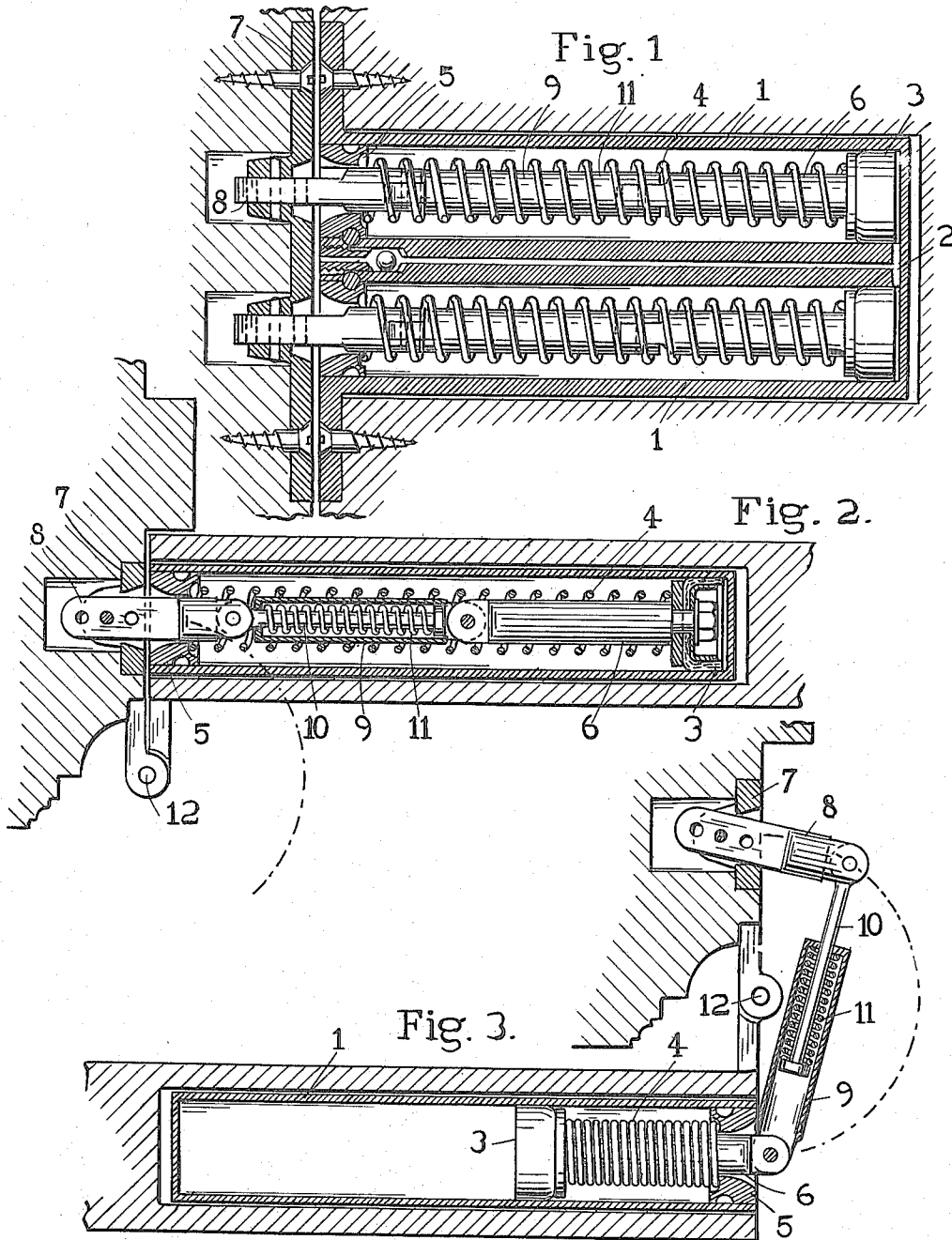
J. J. DALY.

DOOR CHECK.

APPLICATION FILED JULY 14, 1914.

1,131,121.

Patented Mar. 9, 1915.



Witnesses:

George H. Luman
Hugh H. Senior

Inventor,
John J. Daly,

by *Samuel W. Balch*
Attorney.

UNITED STATES PATENT OFFICE.

JOHN J. DALY, OF NEW BRUNSWICK, NEW JERSEY, ASSIGNOR TO THE BANKER
MANUFACTURING COMPANY, OF NEW BRUNSWICK, NEW JERSEY, A COR-
PORATION OF NEW JERSEY.

DOOR-CHECK.

1,131,121.

Specification of Letters Patent.

Patented Mar. 9, 1915.

Application filed July 14, 1914. Serial No. 850,994.

To all whom it may concern:

Be it known that I, JOHN J. DALY, a citizen of the United States of America, and a resident of New Brunswick, in the county of Middlesex and State of New Jersey, have invented certain new and useful Improvements in Door-Checks, of which the following is a specification.

This invention relates particularly to the type of door-check which is adapted to be concealed in a mortise in the door, in which one part, usually the door, contains a cylinder and piston the movement of which is fluid checked, and the other part, usually the door-jamb, carries an anchorage for a flexible connection with the piston.

The object of this invention is to provide a form of check which will require less care in installation, in which the springs for effecting the closure of the door are combined, in which the effectiveness of the springs is increased, and in which the springs are protected from injury.

In the accompanying sheet of drawings which forms a part of this application—

Figure 1 is a vertical section through a door, door-jamb and door-check embodying my invention; Fig. 2 is a horizontal section through the check with the door in closed position; and Fig. 3 is a similar section with the door in full open position.

The door-check comprises a casing with preferably a plurality of cylinders 1 1 since they are of small diameter to admit of being concealed in the door framing. The cylinders at their bottoms communicate with a valved passageway 2 through which air is admitted freely to the cylinders but escapes slowly. In each cylinder is a piston 3 which is forced toward the bottom by a spring 4 which abuts against a bushing 5 at the mouth of the cylinder. This bushing also serves as a guide for a piston-rod 6. A plate 7 screwed to the door-jamb carries an arm 8 which is pivoted so that it can take a perpendicular position in alinement with the cylinder when the door is closed and swing to one side sufficiently to bring its end into the path of travel, of the mouth of the cylinder, shown by a dotted arc, as the door closes. By reason of this the arm can be allowed to project a greater distance

from the door-jamb than if it was a rigid part. Also it requires less accurate positioning of the cylinder and arm relatively to each other. The arm is provided with several pivot-holes at one end to which the pivot can be shifted to alter the distance which the arm projects to suit different conditions and to take up if the springs should weaken. Connecting between the end of the arm and the end of the piston-rod is an extensible link consisting of a sleeve portion 9 and a rod portion 10 telescoping therewith. A spring 11 protected by the sleeve draws the parts together.

When the door is fully opened the telescoping link is extended and its spring compressed. By reason of the length of the arm projecting from the door-jamb the line of the link is at a distance from the axis of the door-hinges and the spring has effective leverage to start the door to close from its open position.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a door-check, a cylinder adapted to be connected to a door, a piston fitting therein, a piston-rod, a plate adapted to be secured to the door-jamb, and arm pivoted to the plate, and an extensible link connecting the end of the arm and the end of the piston-rod, substantially as described.

2. In a door-check, a cylinder adapted to be received in a mortise in the door, a piston fitting therein, a piston-rod, a plate adapted to be secured to the door-jamb, an arm pivoted to the plate opposite the cylinder so that the end is free to swing into the path of travel of the mouth of the cylinder, and an extensible link connecting the end of the arm and the end of the piston-rod, substantially as described.

3. In a door-check, a cylinder adapted to be connected to a door, a piston fitting therein, a piston-rod, an arm adapted to be supported from the door-jamb, and a link consisting of spring-controlled telescoping parts connecting the end of the arm and the end of the piston-rod, substantially as described.

4. In a door-check, a cylinder adapted to be received in a mortise in the door, a piston fitting therein, a piston-rod, a plate adapted to be secured to the door-jamb, an arm piv-

oted to the plate opposite the cylinder so
that the end is free to swing into the path
of travel of the mouth of the cylinder, and
a link consisting of spring-controlled tele-
5 scoping parts connecting the end of the arm
and the end of the piston-rod, substantially
as described.

Signed at New Brunswick, N. J., this 6th
day of July, 1914.

JOHN J. DALY.

Witnesses:

HENRY H. BANKER,
HARVEY J. MOYNIHAN.