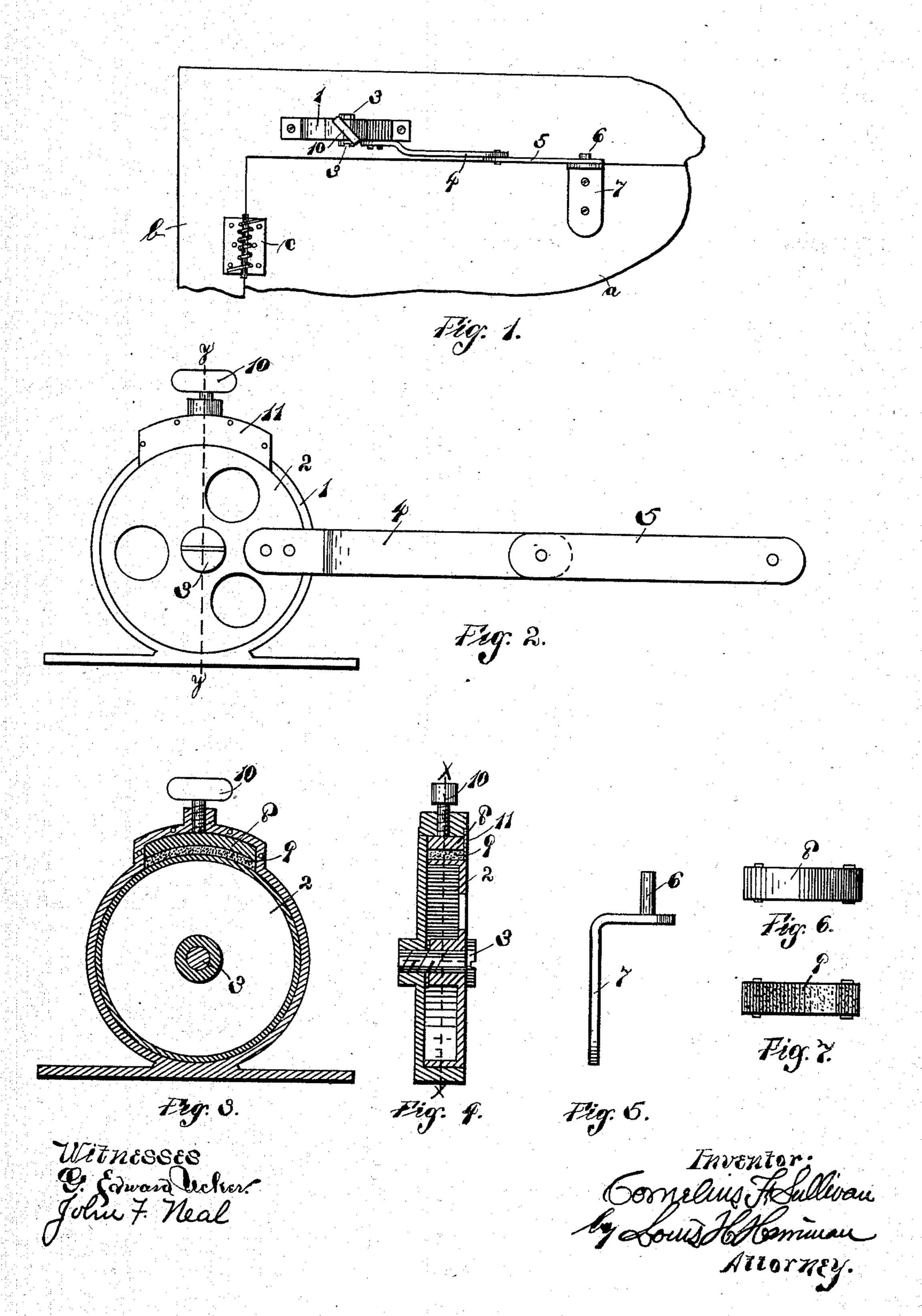
## C. F. SULLIVAN. DOOR CHECK.

(Application filed Feb. 8, 1902)

(No Model.)



## United States Patent Office.

CORNELIUS F. SULLIVAN, OF BOSTON, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THAYER DOOR CHECK AND SPRING CO., A CORPORATION OF MAINE.

## DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 714,255, dated November 25, 1902.

Application filed February 8, 1902. Serial No. 93,173. (No model.)

To all whom it may concern:

Be it known that I, Cornelius F. Sullivan, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Door-Checks, of which the following is a specification.

This invention relates to a form of doorto check which is especially intended to be used
in connection with an ordinary screen-door
having spring-hinges, and is adapted to prevent the slamming of the door.

For an understanding of my invention ref-15 erence is made to the accompanying drawings, in which—

Figure 1 is a front elevation showing my device applied to a door having spring-hinges. Fig. 2 is a bottom plan view thereof detached.

20 Fig. 3 is a cross-section on line x x of Fig. 4. Fig. 4 is a cross-section on line y y of Fig. 2. Figs. 5, 6, and 7 are detail views.

As indicated in Fig. 1, the door a is hinged to the casing b by a spring-hinge c of common 25 form. A bracket 1, having a circular recess in its under side, is secured to the casing directly above the door, as indicated in Fig. 1. A circular disk 2 is concentrically arranged in said recess and is journaled on a bolt 3, 30 which has an enlarged head and passes upwardly through the center of the disk concentric with the inner walls of said recess. The diameter of disk 2 is such that it may rotate freely in said recess. An arm 4 is firmly 35 secured to disk 2, and a link 5 is pivoted to the outer end of said arm and to a pivot 6, which projects upwardly from a bracket 7, the latter being secured to the door at its top (see Fig. 1) and the pivot 6, projecting slightly 40 thereabove, and extends through an aperture in the outer end of link 5. A segmentalshaped concave metal clip 8, having a leather face or shoe 9, is arranged in a recess which leads from the main recess of bracket 1, in 45 which the disk 2 is located, and a thumbscrew 10 passes through the wall of the bracket

1 and engages the opposite side of said clip from said shoe. The curve of the concave side of said shoe preferably corresponds to 50 the curve of the edge of disk 2. A small plate 11 is secured to the under side of said bracket and holds said clip 8 and shoe 9 in place. The thumb-screw 10 is tightened, so that a suitable amount of friction is placed on the edge of disk 2 as it is operated.

The action of the above-described device will be obvious. As the door is opened the disk will rotate on bolt 3. The friction on said disk is suitably adjusted so that it will not retard the opening of the door to a mate- 60 rial degree. As the spring-hinges close the door the friction of the packing or shoe on the disk retards its closing movement to a certain extent, but is not effective to an appreciable extent until the door is nearly closed and the 65 springs of the hinges lose a greater portion of their tension. The friction will then retard the speed of the closing movement so much that the door will shut softly and without the usual slam characteristic of doors which are 70 closed simply by a spring. As the disk 2 is circular, the same device may be used both for a door which is hinged on the right side and a door which is hinged on the left side.

Having described my invention, what I 75 claim as new, and desire to secure by Letters Patent of the United States, is as follows:

The combination with a spring-actuated door, a check therefor comprising a fixed bracket having a circular casing open at one 80 side and having a recess in its curved edge, a circular disk centrally journaled in said casing, an arm secured to said disk, a link pivoted to the outer end of said arm at one end and to the door at its other end, a metal 85 clip fitted in said recess and provided with a friction-imparting face which engages the circular edge of said disk and a screw threaded in the side of said casing and engages the opposite side of said clip from said face 90 whereby the frictional engagement between said disk and clip may be adjusted, substantially as described.

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

CORNELIUS F. SULLIVAN.

Witnesses:
LOUIS H. HARRIMAN,
G. E. UCKER.