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PATENTED NOV. 6, 1906.

A. J. CARLSON & H. S. JUVE.  
ATTACHMENT FOR SCREEN DOORS.  
APPLICATION FILED AUG. 10, 1905.

Fig. 1.

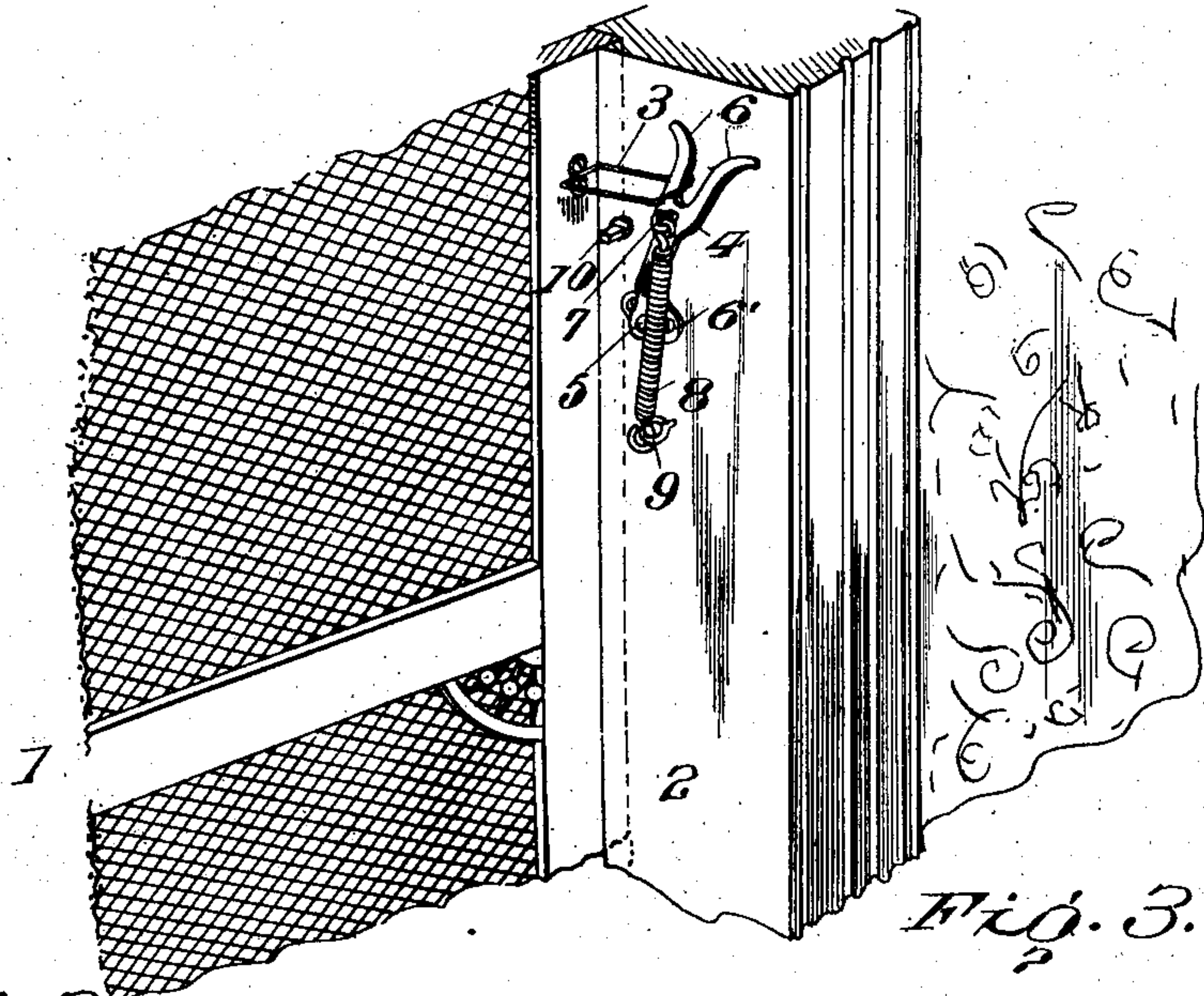
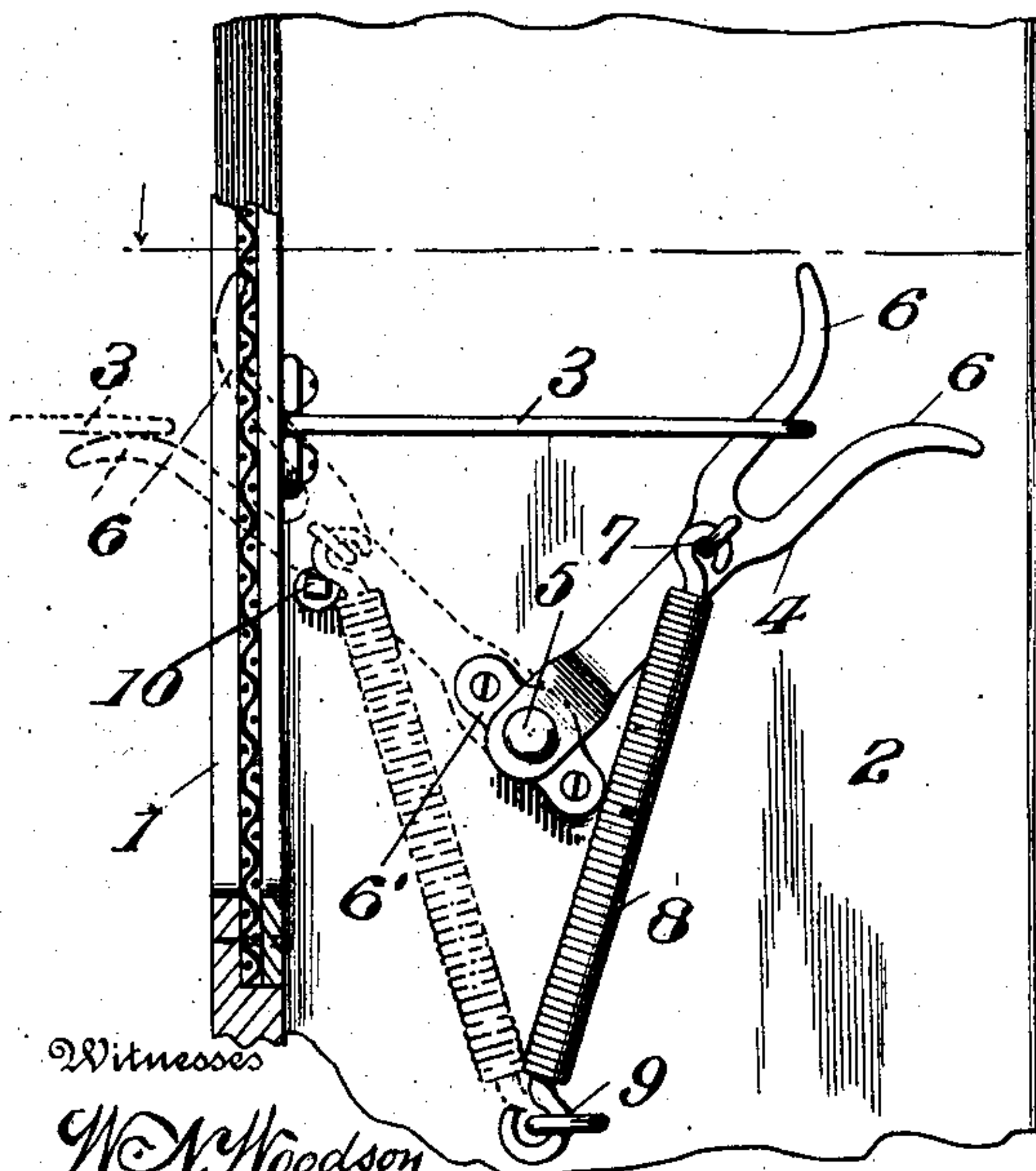


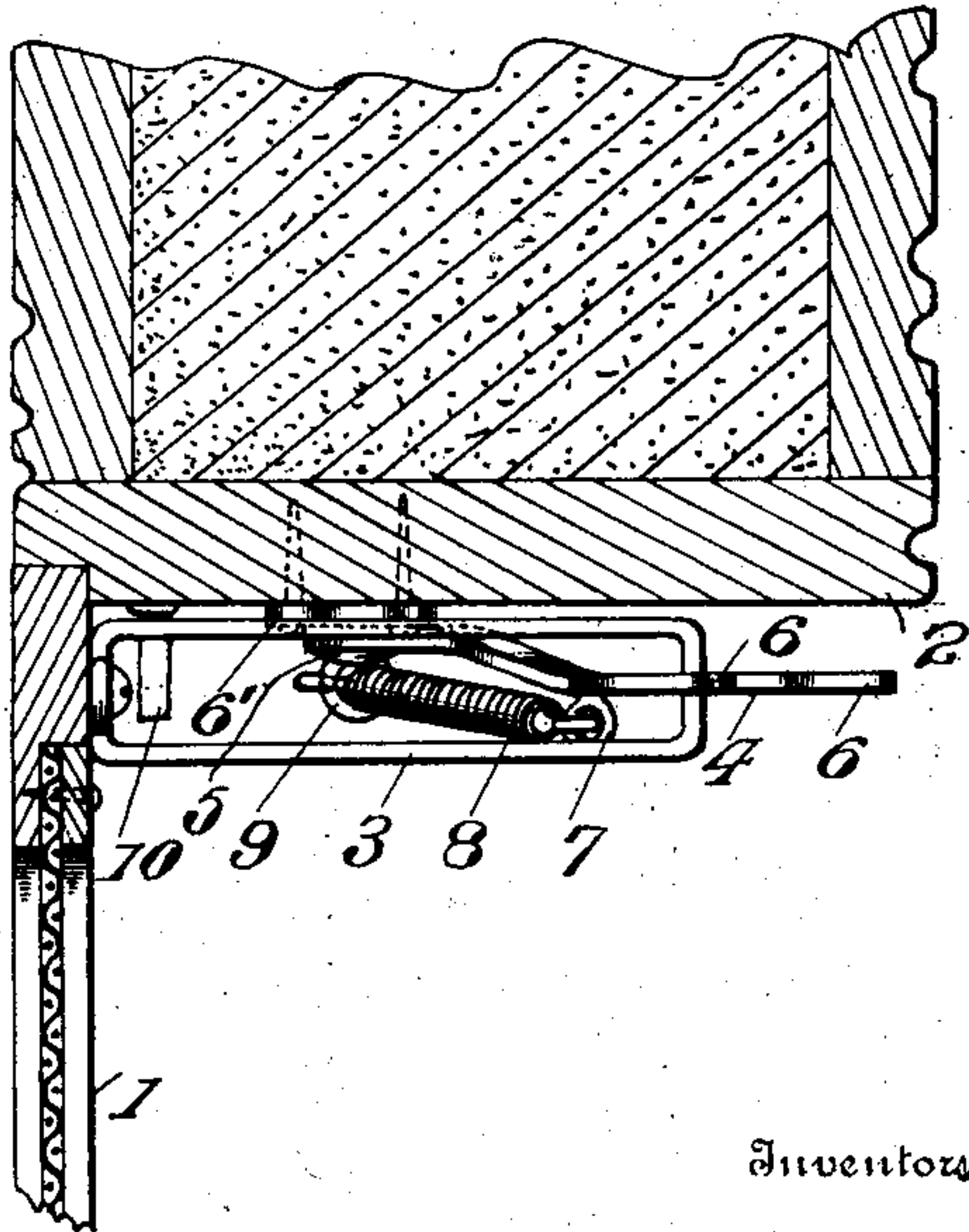
Fig. 2.



Witnesses

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Fig. 3.



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# UNITED STATES PATENT OFFICE.

ANDREW J. CARLSON AND HENRY S. JUVE, OF BALTIC, SOUTH DAKOTA.

## ATTACHMENT FOR SCREEN-DOORS.

No. 834,967.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed August 10, 1905. Serial No. 273,681.

*To all whom it may concern:*

Be it known that we, ANDREW J. CARLSON and HENRY S. JUVE, citizens of the United States, residing at Baltic, in the county of Minnehaha and State of South Dakota, have invented certain new and useful Improvements in Attachments for Screen-Doors, of which the following is a specification.

This invention embodies an attachment for doors, and is particularly designed in its preferred adaptation to be used in connection with screen-doors for holding the latter closed. As is well known, screen-doors often fail to close entirely after they have been opened, owing to the lack of proper tension on the springs, at the hinges, or elsewhere, or due to lack of sufficient movement to give the door impetus by which it will close. The invention provides a device which will automatically connect with the door as it closes to engage suitable means thereon and exert a normal positive force to pull the door closed entirely and hold it in such position.

For a full description of the invention and the merits thereof, and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a broken perspective view showing the invention applied to the frame of a door and a door mounted therein. Fig. 2 is a vertical section through the door, showing a side of the door-frame in elevation, the engaging member carried by the door having been engaged by the holding means upon the door-frame. Fig. 3 is a horizontal section, the parts shown in Fig. 2 being shown in top plan view in the arrangement illustrated.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings, the numeral 1 designates the door, which may be a screen-door or any similarly-mounted door, and the numeral 2 denotes the frame of the door. The door has secured thereto an engaging member in the form, preferably, of a loop 3, said loop being suitably attached at one end to the door, the other end being adapted to coact with means carried by the door-frame, as will be described hereinafter. The means carried by the door-frame, which coöperates with the member 3, is adapted to automatically engage therewith as the door closes, and

said means comprises a lever 4, pivoted at its lower end to the door-frame, as shown at 5, the upper end of said member 4 being bifurcated to form spaced fingers 6, between which the end of the loop 3 is adapted to pass. The pivot 5 is preferably a stud projected from a plate 6, suitably attached to the door-frame. A coiled spring 8 is secured at one end, as shown at 9, to the frame 2 of the door, the opposite end being attached to an eye 7 or lever 4. The tension of the spring 8 will hold the lever 4 inclined outwardly or toward the door 1, as shown in dotted lines in Fig. 2, or said spring 8 will hold the lever 4 in a position inclined in an opposite direction.

The position of the lever 4 when the door is open is such that the said lever is inclined outwardly toward the open door, resting on a stud 10, which projects outwardly from the door-frame 2 and which is the outer extremity of a screw-pin secured to said frame. When in the position above described and shown in dotted lines in Fig. 2, the spaced fingers 6 of the lever 4 are so arranged that as the door closes the loop 3 will engage the more remote finger 6 as it enters the space between the fingers 6, and the impetus of the door will force the holding-lever 4 toward the position shown in full lines in Fig. 2 or inclined in an opposite direction, the spring 8 having been shifted and now tending to pull the lever 4 away from the door. The tension of the spring 8 is thus a positive force, coacting with the lever 4 after it has been moved beyond its dead-center on the pivot 5 to pull said lever away from the door, and as the lever 4 is in engagement with the loop 3 the force acting on the lever 4 will tend to pull the door closed and hold the same in this position. The force coacting with the lever 4 being only that of spring tension, however, it will be noted that when it is desired to open the door, all that is necessary to so do is to push or apply sufficient force thereto to overcome the force exerted by the spring 8 and the holding lever 4 will be moved to the position shown in Fig. 2, the spring 8 then holding it against the stud 10, ready to be engaged by the member 3 as the door again closes.

It will be understood that the holding means comprised in the parts 4 and 8 and adjacent elements is adapted to be secured to any suitable support and will coact with a suitable member on the door to hold said door in the desired position. Further, in its



preferred adaptation the lever 4 is not designed as a lock member, especially when it is used in the manner illustrated and before described. It will of course be understood  
5 that the lever 4 automatically coacts with the engaging member 3, and this is an advantageous feature of the invention.

It is to be understood that this invention comprehends, broadly, the means provided  
10 to automatically connect with the door, and thereby effect movement thereof into a predetermined position, such position in the adaptation shown in the drawings being one in which the door is entirely closed.

15 Having thus described the invention, what is claimed as new is—

In a device of the class described, the combination of a door, a door-frame, door-closing means for the door comprising a lever  
20 pivoted at one end to said door-frame and having its opposite end portion bifurcated to

form spaced fingers, an eye projecting laterally from the lever at a point between its ends, a coiled spring connected at one end with the door-frame and having its opposite end connected with the eye projecting laterally from the lever, a loop member rigidly affixed to the door and adapted to enter the space between the fingers of the lever as said door closes to initially move said lever  
30 against the force of the spring, and a stud projecting laterally from the door-frame to limit the movement of the lever whereby one arm thereof is held in engagement with the loop when the door is fully opened.

In testimony whereof we affix our signatures in presence of two witnesses.

ANDREW J. CARLSON. [L. S.]

HENRY S. JUVE. [L. S.]

Witnesses:

A. T. WOLD,

CHRIS. JENSVOLD.