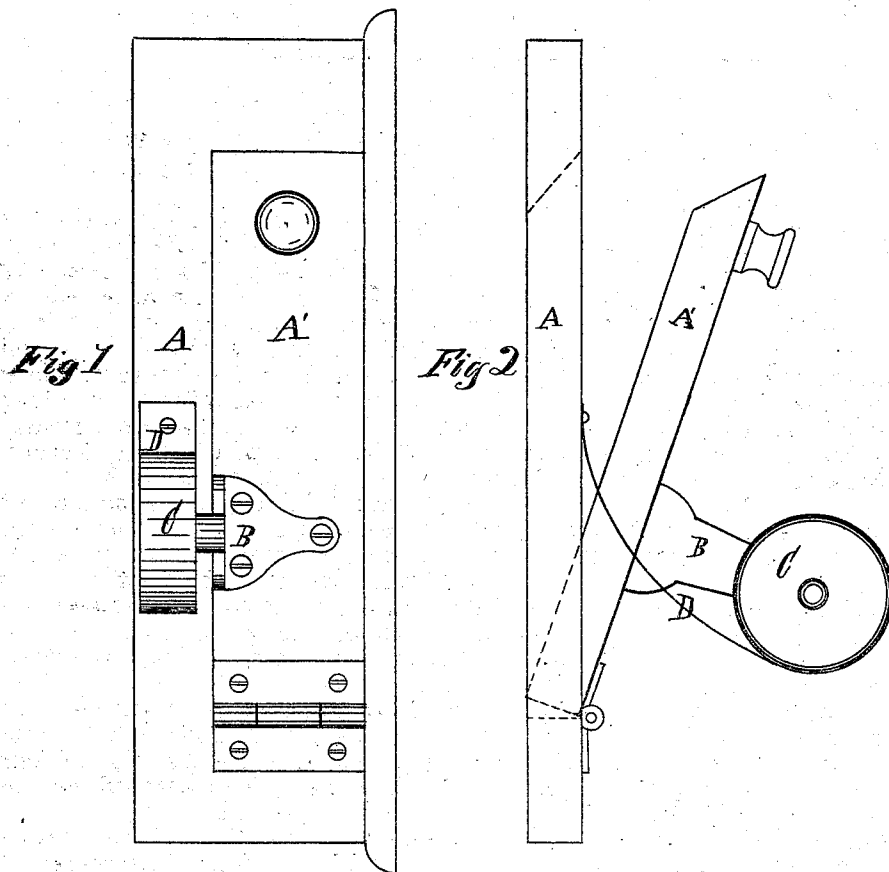


A. D. HOFFMAN.

Door-Springs.

No. 135,914.

Patented Feb. 18, 1873.



Witnesses

N. H. Sherburne
A. S. Alexander

Inventor

Austin D. Hoffman
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UNITED STATES PATENT OFFICE.

AUSTIN D. HOFFMAN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF HIS
RIGHT TO NATHAN FRIEDMAN, OF SAME PLACE.

IMPROVEMENT IN DOOR-SPRINGS.

Specification forming part of Letters Patent No. 135,914, dated February 18, 1873.

To all whom it may concern:

Be it known that I, AUSTIN D. HOFFMAN, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Door-Springs; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a front view of my said improvement, and Fig. 2 is a side elevation of the same.

Similar letters of reference indicate like parts in both figures of the drawing.

My invention has for its object to provide a device by the use of which a door may be made self-closing; and it consists in a spring, one end of which is permanently attached to the face-casing, and the other end coiled around and attached to a wheel pivoted upon an angle-bar, which is firmly affixed to the door. The arrangement of the spring is such as to uncoil as the door is opened, and to recoil around the wheel by its own elasticity, thereby closing the door, all of which will be more fully understood by the following description:

In the drawing, A represents the face-cas-

ing of the door-frame, and A' the door, both of which are arranged in the usual manner. B is a metal angle-bar, which is permanently affixed to the door and extends outward at a right angle therefrom. Pivoted upon the outer extremity of this bar is a wheel, C, which is so arranged as to freely revolve thereon. Firmly secured to and coiled around the periphery of this wheel is a flat metal spring, D, one end of which is permanently attached to the face-casing, as shown in Fig. 2.

The action of this spring is such that as the door is opened the spring is made to uncoil from around the wheel, and as power is removed from the door the elasticity of the spring causes the same to recoil around the wheel, thereby closing the door.

Having thus described my invention, I claim—

The combination of the angle-bar B upon the door, wheel C, and spring D, as described, the spring secured above the door and acting to close the same by coiling around the wheel, substantially as specified.

The above specification of my invention signed by me this 4th day of December, 1872.

AUSTIN D. HOFFMAN.

Witnesses:

N. H. SHERBORNE,
A. S. ALEXANDER.