

W. S. Barlow,
Door Spring.
N^o 84,159. Patented Nov 17, 1868.

Fig 1.

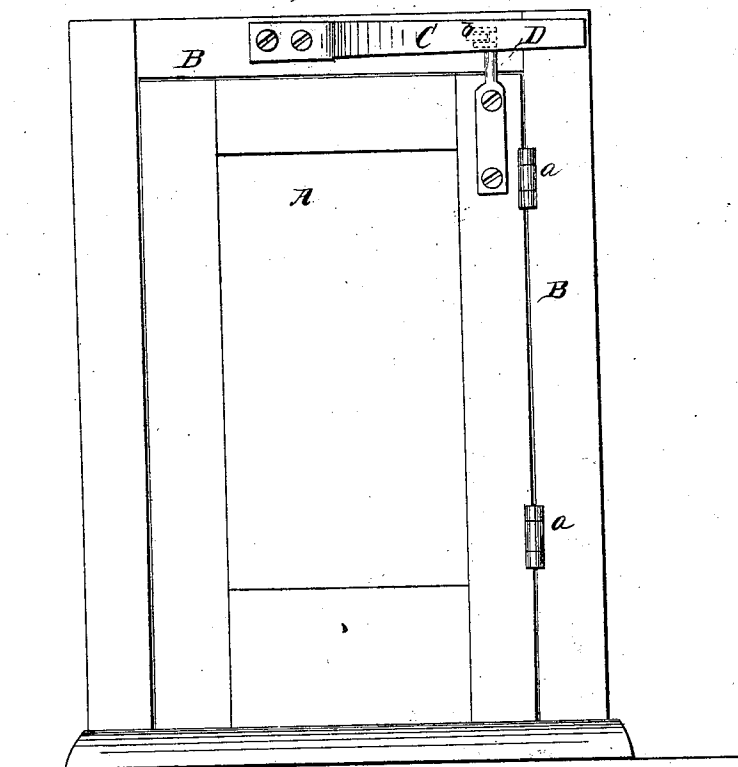
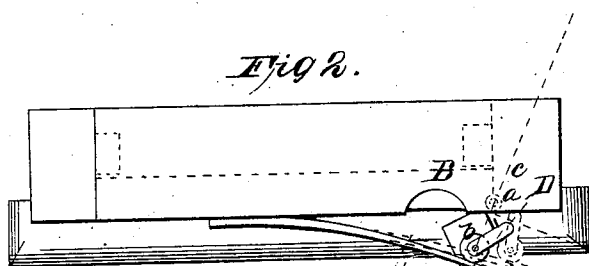


Fig 2.



Witnesses:
W. C. Ashkett
Wm A Morgan

Inventor.
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Attorneys

United States Patent Office.

WARREN S. BARLOW, OF PATERSON, NEW JERSEY.

Letters Patent No. 84,159, dated November 17, 1868.

IMPROVEMENT IN DOOR-SPRINGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WARREN S. BARLOW, of Paterson, in the county of Passaic, and State of New Jersey, have invented a new and improved Door and Window-Blind Spring; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a front elevation of a door provided with my improved spring.

Figure 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new arrangement and combination of a spring with doors and window-blinds, and its object is to so arrange the spring that it is under full control, and that it may serve to close the door, to open it, or to hold it partly open, as may be desired.

The invention consists in attaching a spring to the casing and a stud to the face of a door or blind, the inner side of the spring resting against the end of the stud in such a manner, that when the door is opened just so far that a line drawn from the axis of the door or blind-hinge to the point of contact of the stud and spring is perpendicular to the inner face of the spring, the door or blind will remain thus partly opened, as the force of the spring will be expended upon the perpendicular line; but if the door is opened beyond the aforesaid point, the spring will serve to throw it quite open, and if it is not opened to the said point, the spring will serve to reclose it, and the spring can thus be made to act in any desired manner upon the door or blind.

A, in the drawing, represents a door or window-blind of ordinary or suitable construction, secured, by means of suitable hinges *a a*, to its casing, B.

To the upper part of the casing is secured one end of a spring, C, which is made either of wire or of sheet-metal, and which rests against the end of a stud, D, that is secured to the door or shutter A, as shown.

The end of the stud may, if desired, be provided with a friction-roller, *b*, as shown.

When the door is shut, the end of the stud fits into a recess in the casing, while the spring lies flat against the front of the casing.

But when the door is being opened, the end of the stud comes against the spring, and gradually forces the free end of the same outward, until it reaches the position shown in fig. 1, in which a blue line (*c d*) drawn from the axis of the hinge *a*, through the touching-end of the stud D, is at right angles to the spring, as shown.

In this position the spring acts only to retain the door or blind thus partly open, as its power is expended in the direction of the line *d c*.

But when the door is either not so far or farther opened, the spring forces the stud against the casing, and thus serves to either close or quite open the door or blind.

I claim as new, and desire to secure by Letters Patent—

The within-described combination and arrangement, with a door or blind, A, and casement B, of a spring, C, and stud D, in such manner as that the opening of the door or blind shall draw or extend the spring, substantially as herein set forth.

The above specification of my invention signed by me, this 10th day of February, 1868.

WARREN S. BARLOW.

Witnesses:

WM. F. McNAMARA,
ALEX. F. ROBERTS.