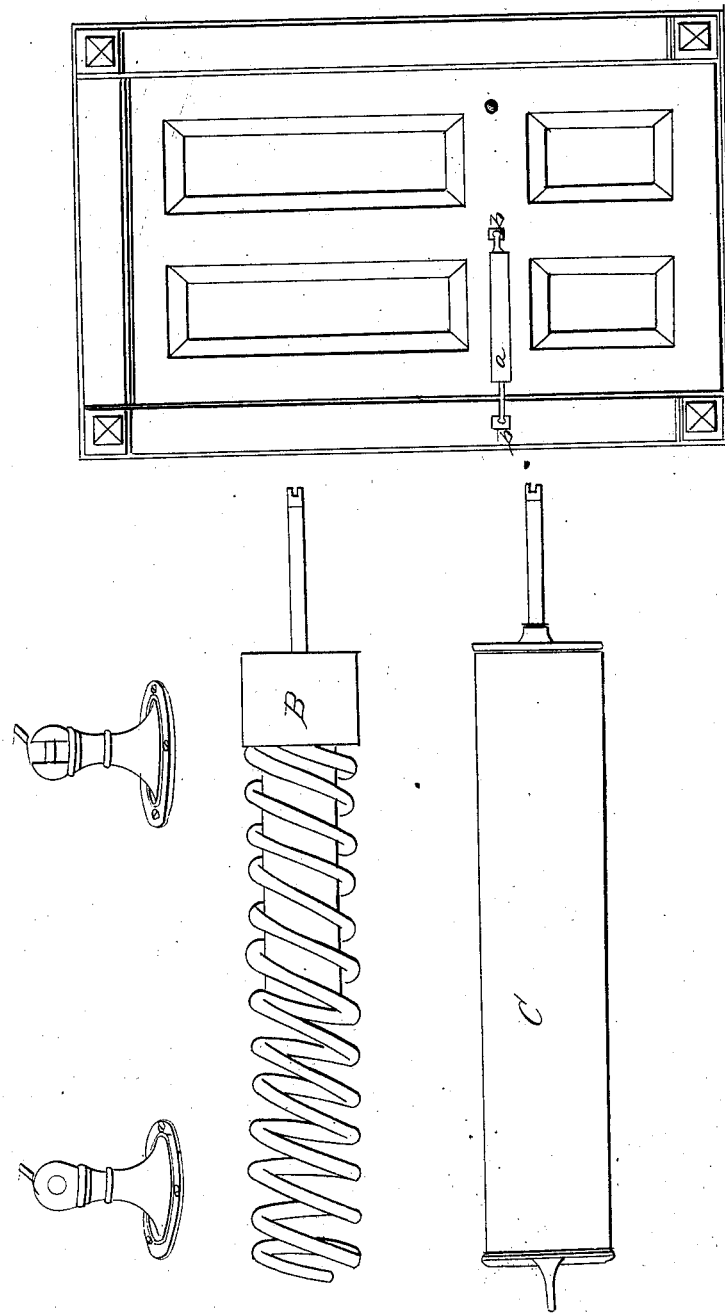


*W. Wilson,*  
*Door Spring.*  
*N<sup>o</sup> 845.* *Patented July 17, 1838.*



# UNITED STATES PATENT OFFICE.

WM. WILSON, OF GREENFIELD, MASSACHUSETTS.

## DOOR-SPRING FOR CLOSING DOORS.

Specification of Letters Patent No. 845, dated July 17, 1838.

*To all whom it may concern:*

Be it known that I, WILLIAM WILSON, of Greenfield, in the county of Franklin and State of Massachusetts, have invented a new and useful Door-Spring for Closing Doors, called the "Detachable Spiral Door-Spring"; and I do hereby declare that the following is a full and exact description.

It consists of a spiral steel spring (A) of any convenient diameter and length inclosed in a metallic case or cylinder, C, fitting to the spring, and having a projected point from the center of one end, or the closed end of the cylinder may terminate in a cone. Into the hollow, at one end of the spring, insert a wooden or metallic piston (B), two or three inches long, with a shoulder, to operate as a follower, having a piston rod of steel wire projecting from the center of the piston through the cap which covers the open end of the case of cylinder. The piston rod having a half round or semi-circle cut into the end of it, so as to play or turn on a pin put transversely through the split head of a standard (D) placed on the casing of the door, and opposite to another standard placed on the door and on which the projected end of the case or cylinder rests in a notch or hole made to receive the pointed end of the cylinder aforesaid. The standards are placed, one upon the casing of the door, the other on the panel, and nearly opposite to the latch, and at a distance from each other, something less than the length of the spring from the pointed end of the cylinder to the end of the piston rod aforesaid, so as to give the spring a sufficient power when put upon the standards to keep the door closed and sustain

itself upon the standards. The spring can be removed or placed upon the standards at pleasure by compressing the spring with the hand, so as to liberate the pointed end of the cylinder from its socket in the head of the standard.

The operation of the spring is as follows: When the spring is placed upon the door, and the door is opened, the spring is compressed, by means of the piston and rod aforesaid, the distance between the standards being shortened, and gives the spring a gradual additional power the farther the door is opened. And when the force which opens the door is withdrawn, the power of the spring is left free to exert itself in closing the door. As a peculiarity to the spring, the power of the spring is always exerted in a right line, whether in opening or closing the door, thus giving it its full force and power unresisted. The forward standard acts the part of a lever in closing the door having the power of the spring acting upon it. The spring can be applied to the closing of gates or anything else of a similar kind.

What I claim as my invention, and desire to secure by Letters Patent is—

The application of the spiral spring to the purposes aforesaid in the manner aforesaid, and the combination of it, with the cylinder, piston and rod and standards, and the mode and manner of attaching it to, and detaching the same from the door.

WM. WILSON.

Witnesses:

ALMON BRAINARD,  
ALANSON CLARK.