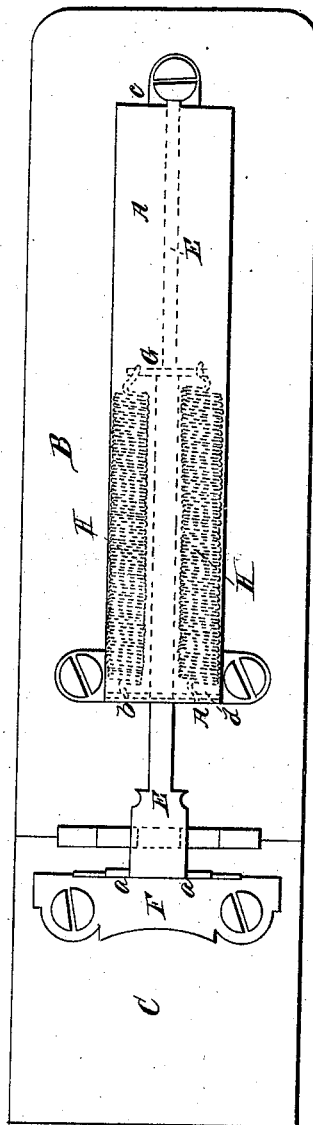


*T. Thorpe,*  
*Door Spring.*  
*N<sup>o</sup> 506.* *Patented Dec. 7, 1837.*



# UNITED STATES PATENT OFFICE.

THOMAS THORPE, OF WEST CAMBRIDGE, MASSACHUSETTS.

## DOOR-SPRING.

Specification of Letters Patent No. 506, dated December 7, 1837.

*To all whom it may concern:*

Be it known that I, THOMAS THORPE, of West Cambridge, county of Middlesex, and State of Massachusetts, have invented a new  
5 and useful Improvement in Door-Springs.

The said improvement, the principle thereof, and modes in which I have contemplated the application of the same, together with such parts, combinations, or  
10 characteristics by which it may be distinguished from other inventions, and which I claim, I have fully set forth in the following specification and drawings referred to herein.

15 A A represents the outer casing of brass, or other suitable metal, shaped as seen in the drawings, or otherwise properly formed.

B is the door on which the spring is to be fastened; C, the door frame.

20 E is a metallic rod, turning on a hinge at *a*, in the side of the piece of metal F, screwed to the door frame. The rod E passes through holes in the ends *b*, *c* of the casing A, moving freely back and forth in  
25 said holes.

G is a cross bar, attached to the rod E in a proper manner, and has connected to each extremity the end of a wound spring, H H, whose opposite end is confined to the end *b*

of the casing, or to a pin *d*, passing through 30 the sides thereof.

When the door is opened, the spring H H are extended by the movement of the rod E through the slots in the ends *b*, *c* of the casing, and on withdrawing the force ap- 35 plied to open the door, the springs contract, and immediately close the same.

Instead of two springs, I may use only one, or I may employ three or more, should it be deemed advisable. 40

The main advantage of this spring consists in the exertion of a strong force to close the door, when nearly shut. Other kinds of door spring generally fail in this part of their operation. 45

I claim as my improvement—

The above arrangement of springs acting on a rod E, and operating in manner above described.

In testimony that the above is a true de- 50 scription of my said invention, I have hereto set my hand this ninth day of November, in the year eighteen hundred and thirty seven.

THOMAS THORPE.

Witnesses:

R. H. EDDY,  
A. E. WILSON.