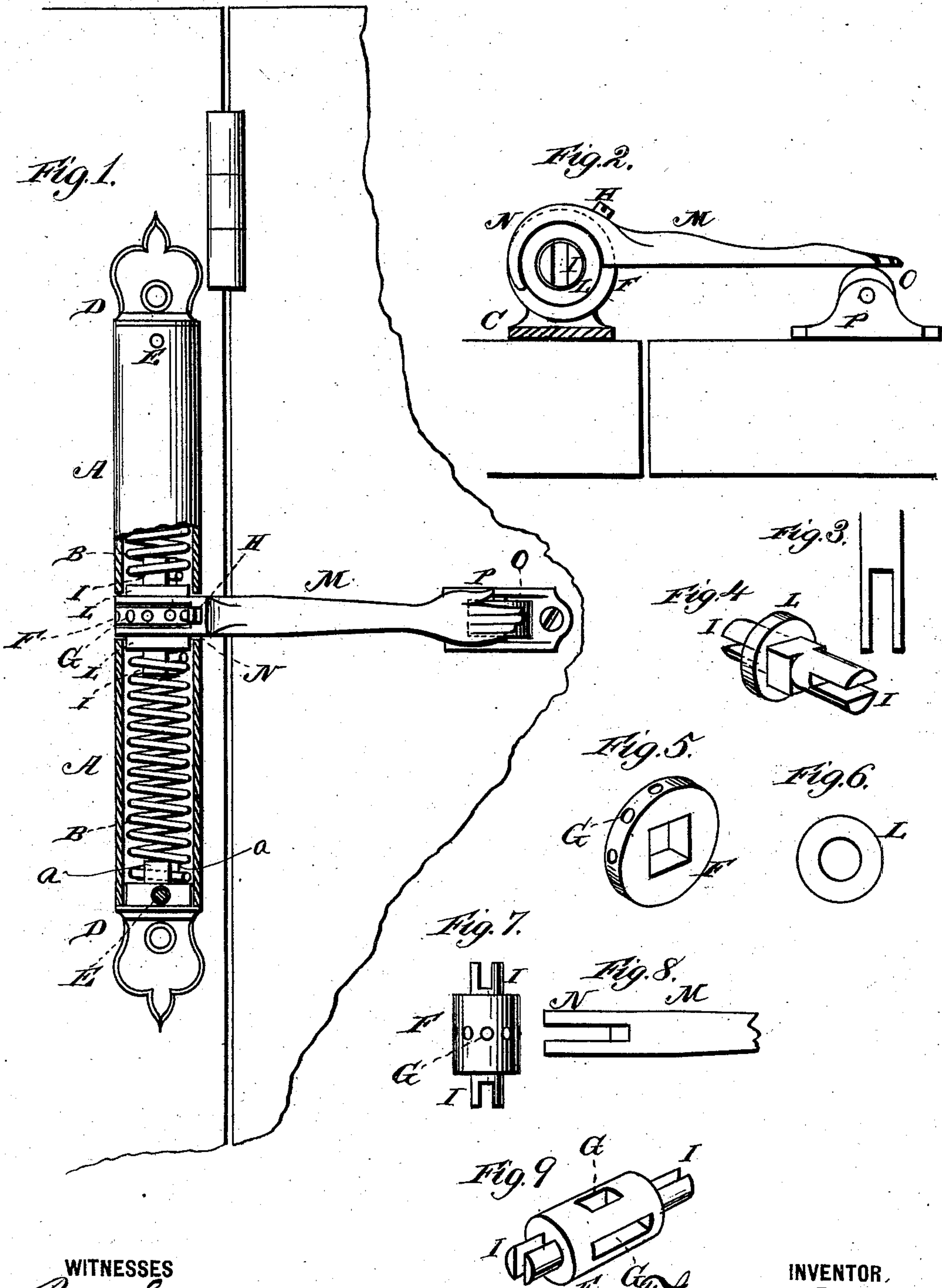


T. ROWE.
Door-Spring.

No. 224,730.

Patented Feb. 17, 1880.



WITNESSES

Robert Everett
Chas. G. Page

INVENTOR,

Thomas Rowe
Gilmore, Smith & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

THOMAS ROWE, OF BROOKLYN, NEW YORK.

DOOR-SPRING.

SPECIFICATION forming part of Letters Patent No. 224,730, dated February 17, 1880.

Application filed October 18, 1879.

To all whom it may concern:

Be it known that I, THOMAS ROWE, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Spring-Hinges; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of the face of my spring, partly in section. Fig. 2 is a side elevation, partly in section; and Figs. 3, 4, 5, 6, 7, 8, and 9 are detail views.

My present invention relates to door-springs; and the improvement consists in the construction and arrangement of parts, as will be fully set forth in the following description, and particularly pointed out in the claim.

In the accompanying drawings, A A designate two cylindrical metal casings, which inclose right and left springs B B, the said casings being formed integral with or secured to a base-plate, C. The caps which close the outer ends of the casings A are formed by the metal brackets D, which are adapted to be secured by means of bolts or screws to the door or frame, and the outer ends of the springs are bent so as to engage with notches or recesses formed by studs *a a* projecting from the inner faces of the brackets.

E E designate pins which are passed through the casings and brackets, so as to secure the parts firmly together.

F designates a cylindrical block, formed with a series of round, square, or oblong holes, G, for the reception of a pin, H. This block, as shown in Fig. 7, is formed with the short journals I, which are recessed, so as to engage with the bent inner ends of the springs, in which case the block will be of sufficient length to extend into both of the adjacent ends of the two separated casings A A.

I may, however, arrange this part of the device as shown in Figs. 4 and 5, in which the

block F is fitted upon the square part of a shaft which has its journal ends I notched or recessed, so as to engage with the bent ends of the springs. In this arrangement thimbles L will be slipped upon the shaft, one at each side of the block.

M designates a bar, which is formed with a bifurcated hook-shaped end, N, adapted to fit upon the block F (shown in Figs. 7 and 8) or upon the thimbles L, (shown in Figs. 2 and 3.) When said bar M is fitted either upon the cylinder-block or upon the thimbles the pin H is set in one of the holes G, so as to project outward between the tines of the bifurcated end N of the bar.

O designates a roller, which is journaled in a suitably-formed bracket, P, adapted to be secured to the door or casing.

The resiliency of the springs maintains the pin H against the bar M, and hence holds the said bar upon the roller; and it will be found that while the hook end of the bar embraces but one-half of the circumference of the cylindrical block or thimbles, this action of the pin against the bar will effectively maintain the same in connection with the block or thimbles.

As the door is opened the bar is thrown outward while the roller travels along upon the same, and so soon as the door is released the spring-power will act upon the same to close it in the manner above set forth.

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

The springs B, arranged within the casings A, in combination with the cylindrical block F and the bar M, formed with a curved bifurcated end, adapted to be fitted in place between the inner adjacent ends of the casings, substantially as shown and specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

THOMAS ROWE.

Witnesses:

FRANCIS S. VAN BOSKERCK,
THOMAS ROWE, Jr.