

(No Model.)

J. A. MOHR.  
Door Spring.

No. 236,689.

Patented Jan. 18, 1881.

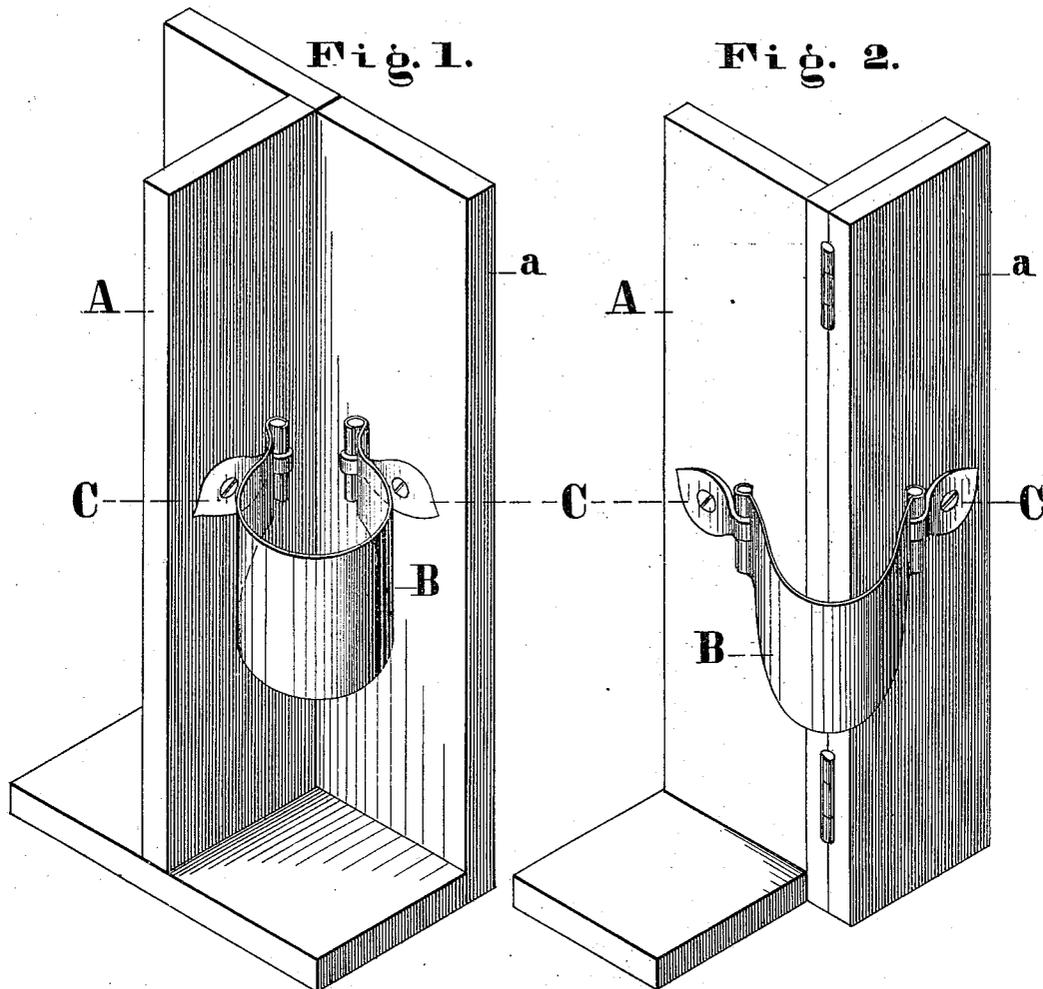
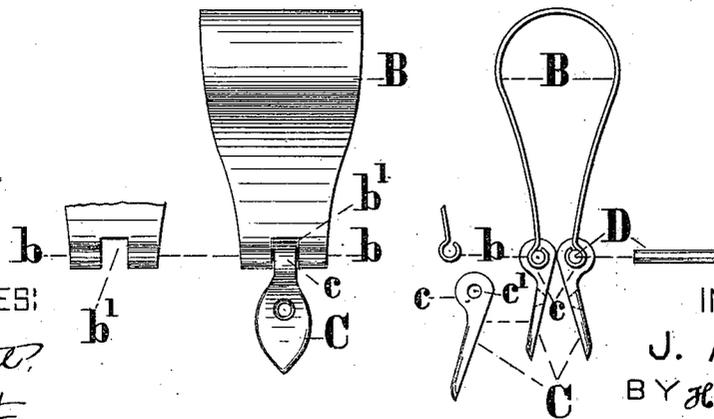


Fig. 5.

Fig. 4.



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# UNITED STATES PATENT OFFICE.

JOHN A. MOHR, OF MANCHESTER, IOWA.

## DOOR-SPRING.

SPECIFICATION forming part of Letters Patent No. 236,689, dated January 18, 1881.

Application filed September 20, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. MOHR, of Manchester, in the county of Delaware and State of Iowa, have invented an Improvement in Door-Springs; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention consists in the combination of a plate-spring of peculiar form with certain bearing ears or flaps, and with certain securing-pins, by means of which a simple spring is obtained, which can be produced at a very low cost.

In the drawings, Figure 1 represents an isometric view of my improved spring applied to a door, the latter being represented in its closed position; Fig. 2, a similar view with the door in its open position, and Figs. 3 and 4 side and end elevations of the spring detached.

To enable others skilled in the art to make my improved spring, I will proceed to describe fully the construction of the same.

A, Figs. 1 and 2, represents the jamb of the door, and *a* the door itself.

B represents a spring, consisting of a plate of sheet-steel wider at the central portion than the ends, which is bent into U-shape form, as shown in Fig. 4, and is set in that position and properly tempered to give it the requisite elasticity.

*b b*, Figs. 3 and 4, represent eyes formed in the ends of the plate by properly bending the same, and *b'*, Fig. 3, a central recess between the eyes.

C C represent bearing ears or flaps, each of which is provided with a proper screw-hole, by means of which the same is properly screwed to the jamb or door, and with a projection, *c*, having an eye, *c'*, as shown, which projection is adapted to extend into the recess *b'*, as shown in Fig. 3.

D, Fig. 4, represents a securing-pin, which

is inserted into the eyes *b* of the plate B and the eye *c'* of the flap C, for the purpose of securing the parts properly together.

The manner of applying the complete spring to the door is shown in Fig. 1, the bearing-flaps being secured to the door and jamb at such points that the spring, when in its normal position, will act to keep the door closed.

The operation is substantially as follows: By the ordinary opening of the door the end of the spring upon the door is drawn away from that upon the jamb against the resistance of the spring. When, consequently, the door is released, the same is closed by the necessary reaction. When the door is opened wide, as shown in Fig. 2, the tendency of the spring, it will be observed, is to keep it open.

Some of the advantages of the described construction are as follows: By constructing the spring-plate in the form shown—that is, with the widest part in the center—the material is disposed in the best manner—that is, the greater part of the same is located at the point of greatest strain.

The construction of the spring, as a whole, is very simple, and it can be produced at very low cost.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The door-spring described, consisting of the plate-spring B, having the eyes *b* formed integral therewith, the bearing ears or flaps C, having the eye-projection *c*, and the securing-pins D, uniting the flaps and plate together, arranged and attached in the manner set forth.

This specification signed and witnessed this 16th day of September, 1880.

JOHN A. MOHR.

Witnesses:

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