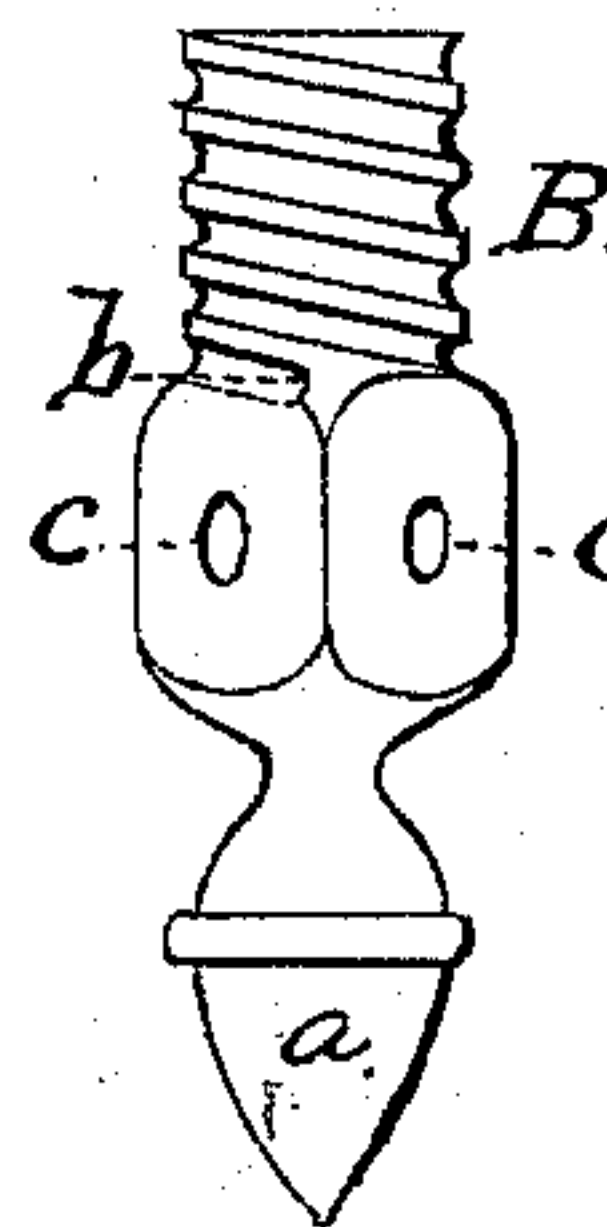
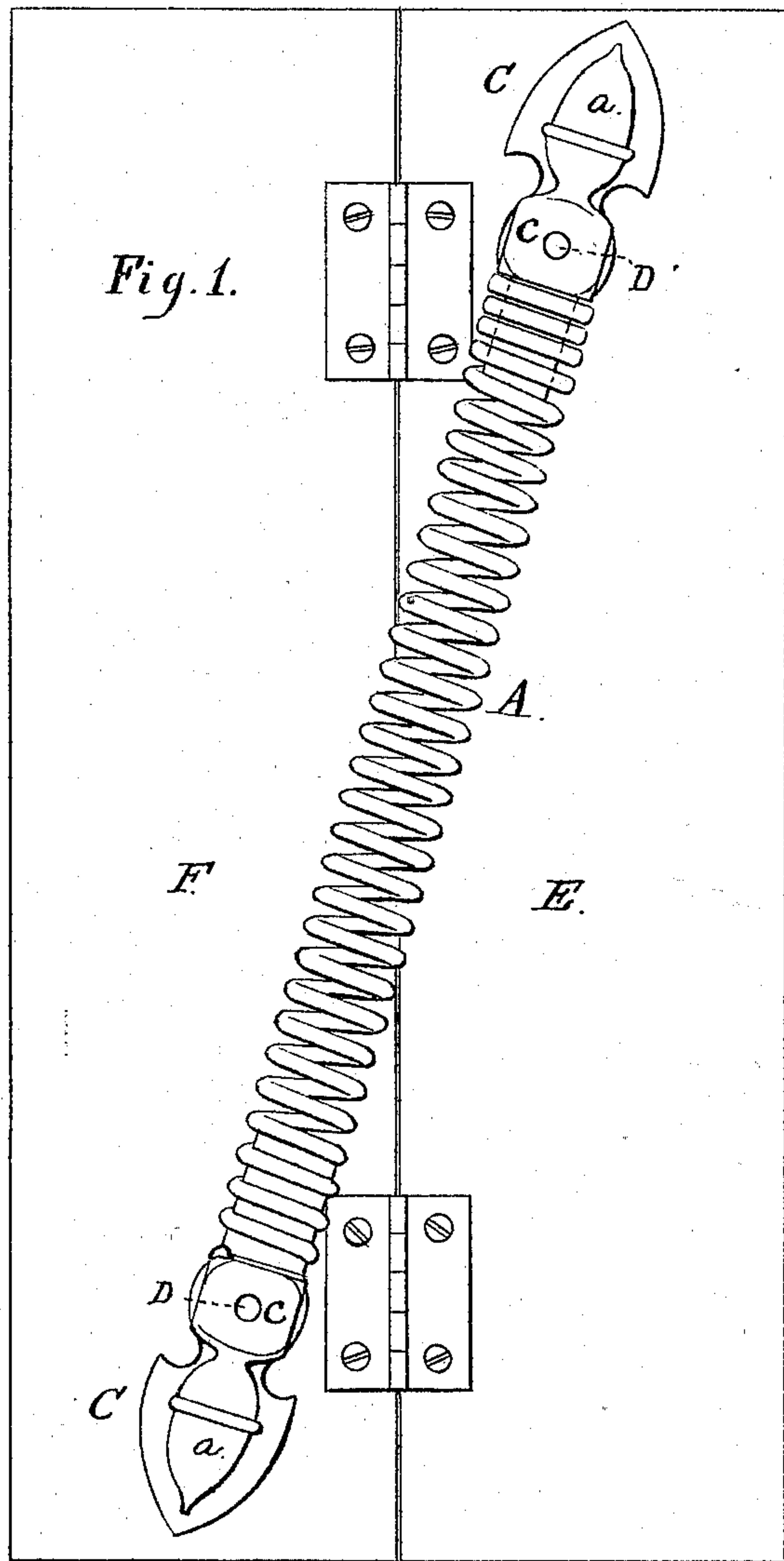


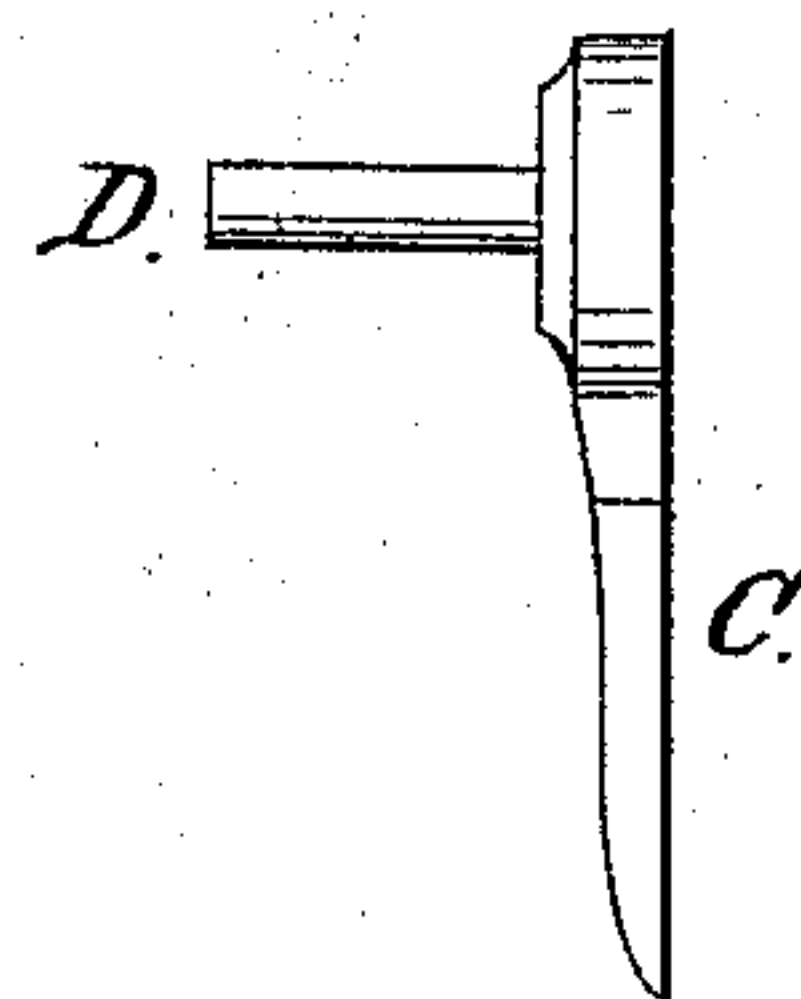
**J. T. FOSTER.**  
**Door and Gate Springs.**

No. 137,770.

Patented April 15, 1873.



*Fig. 2.*



*Fig. 4.*

Witnesses :

*W. Burris*  
*A. B. Philbrick*

Inventor :

*John T. Foster.*  
*By G. B. Towles att.*

# UNITED STATES PATENT OFFICE.

JOHN T. FOSTER, OF JERSEY CITY, NEW JERSEY.

## IMPROVEMENT IN DOOR AND GATE SPRINGS.

Specification forming part of Letters Patent No. **137,770**, dated April 15, 1873; application filed February 27, 1873.

*To all whom it may concern:*

Be it known that I, JOHN T. FOSTER, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Door and Gate Spring; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawing which forms part of this specification.

Figure 1 is a front view. Fig. 2 is a view of screw-plug detached from its connection with spring and pin. Fig. 4 is a side view of plate and pin with screw-plug removed.

Like letters in all the figures of the drawing indicate like parts.

This invention consists of a plug having screw-threads cast or otherwise made thereon, in combination with a coiled spring, so as to fasten the ends of the spring to the plug by screwing them thereon, thus dispensing with the making of a hole or slot in the plug and the bending or turning of the end of the spring therein to fasten the same, as heretofore; also, of a fixed pin, in combination with the elements above, for adjusting the plug by means of holes through the same, so as to increase or diminish the pressure of the spring, as will be hereinafter more fully explained.

A is the coiled spring; B, the screw-plug, having its head *a* made so as to give the spring an ornamental look and at the same time serve the purpose of a handle for adjusting the spring. The screw-threads of the plug are made to terminate in a slight depression, forming a shoulder, *b*, the end of the spring being screwed onto the plug until it comes against the shoulder, when it is slightly bent into the depression so as to make it fast. The plug between the head and where the end of the spring terminates is made with flat or square sides, having a hole, *c*, running centrally through each side. C C are plates provided with fixed pins D D. These plates are fastened by screws, one to the door E and the other to the adjoining wood-work, F, in such positions that the plugs of the spring can be readily made to connect by their holes with the pins,

To adjust the spring so as to increase or diminish its pressure, the plug at one end thereof is slipped off from the pin and a piece of stiff wire inserted in the hole on the side to give leverage or purchase enough upon the plug to enable it to be turned to the right or left hole, as may be required, when it is slipped on over the pin again.

It will be noticed that the greater the pressure upon the spring the more tightly will it be caused to bind in the screw-threads of the plug, thus giving the spring a steady and rigid connection therewith.

When it is desired to hold the door open, the plug is first removed from the pin and the door then opened, when the plug is placed on the pin again.

The spring can be readily removed, when its use is not required, without removing either of the plates.

The advantages of my improved spring are that its ends can be more conveniently attached by the employment of screw-plugs, and, besides, can be adjusted with greater facility to increase or diminish the pressure of the spring or hold the door open.

I do not claim a removable screw or pin for adjusting the plug, as I am aware that the same is covered by the patent of Patrick Smith, granted August 3, 1869, No. 93,359; but

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

1. For use in a door and gate spring, a plug provided with screw-threads so as to fasten the ends of a coiled spring to the plug by screwing them thereon, substantially as set forth.

2. In combination with the elements above, a fixed pin for adjusting the plug by means of holes through the same, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of February, 1873.

J. T. FOSTER.

Witnesses:

W. MUIRHEAD,  
J. F. MCGEE.