

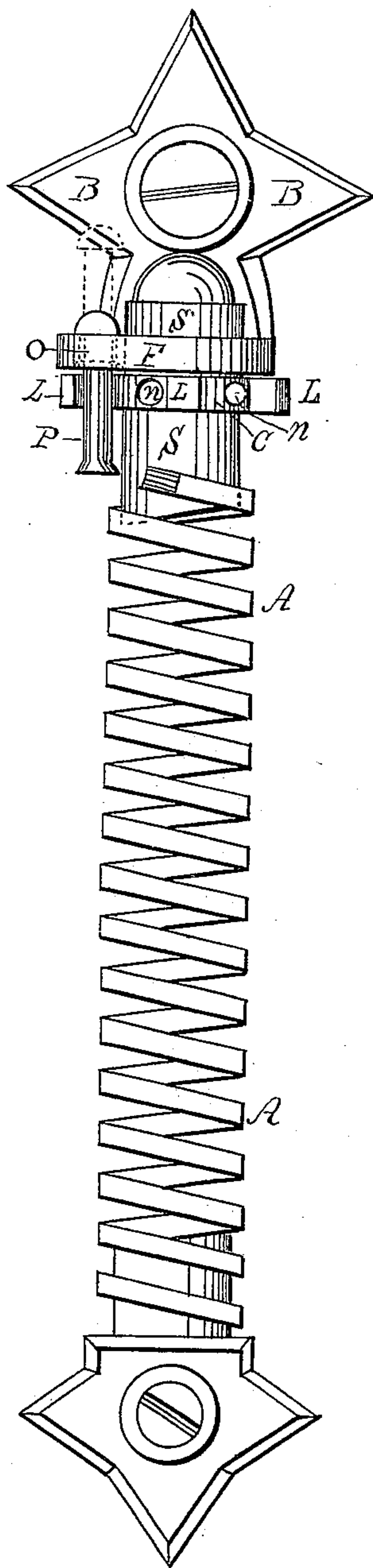
(No Model.)

W. F. H. AMWAKE.

DOOR SPRING.

No. 253,173.

Patented Feb. 7, 1882.



Witnesses.
H. Carpenter.
Salome R. Carpenter

Inventor
Wm. F. H. Amwake
per Wm. R. Gerhart
his Attorney

UNITED STATES PATENT OFFICE.

WILLIAM F. H. AMWAKE, OF LANCASTER, PENNSYLVANIA.

DOOR-SPRING.

SPECIFICATION forming part of Letters Patent No. 253,173, dated February 7, 1882.

Application filed October 13, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. H. AMWAKE, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Door-Springs, of which the following is a specification.

My invention relates to door-springs in which the tension of the same can be regulated; and the object of my improvement is to facilitate the manner of securing the stem of the spring after the tension of the latter has been increased or diminished. I attain this object by the mechanism illustrated in the accompanying drawing, which is a view of the entire mechanism.

The top bracket, B, of a coiled door or gate spring, of any of the old and well-known forms, is cast with a pin-opening, O, through its flange F, parallel with the opening through which the stem S of the spring A passes, the said pin-opening having a countersink at its lower end. Working through this opening O is a fast-pin, P, with a head at its upper end and a flange at its lower, corresponding with the countersink at the bottom of the opening O. The stem S has a collar or flange, G, cast on it just above the point of its connection with the spring A, affording a continuous bearing against the lower surface of the flange F, with lugs L projecting therefrom, which engage the pin P.

In order to vary the tension of the spring, the fast-pin P is pulled up, as shown by the dotted lines, the lower flange of the same fitting into the corresponding countersink in the under side of the flange F, and the stem is then turned by means of a pin inserted in the horizontal openings *n*. When the tension is increased or diminished, as desired, the pin is dropped, and, engaging one of the lugs L, prevents further movement of the stem.

The advantage in my arrangement is the securing of the pin to the bracket and the ease and facility with which it can be made to prevent or allow the movement of the stem.

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

A flange, F, of a bracket, B, having an opening, O, parallel with an opening in the same, through which the stem S passes, and having a countersink at its lower side, in combination with a fast-pin, P, having a head at its upper end, and a flange about the lower corresponding with the countersink aforesaid, and lugs L, projecting from the collar C, all as and for the purpose specified.

WILLIAM F. H. AMWAKE.

Witnesses:

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