

E. Stimson,

Door Spring.

N^o 71,081.

Patented Nov. 19, 1867.

Fig. 1

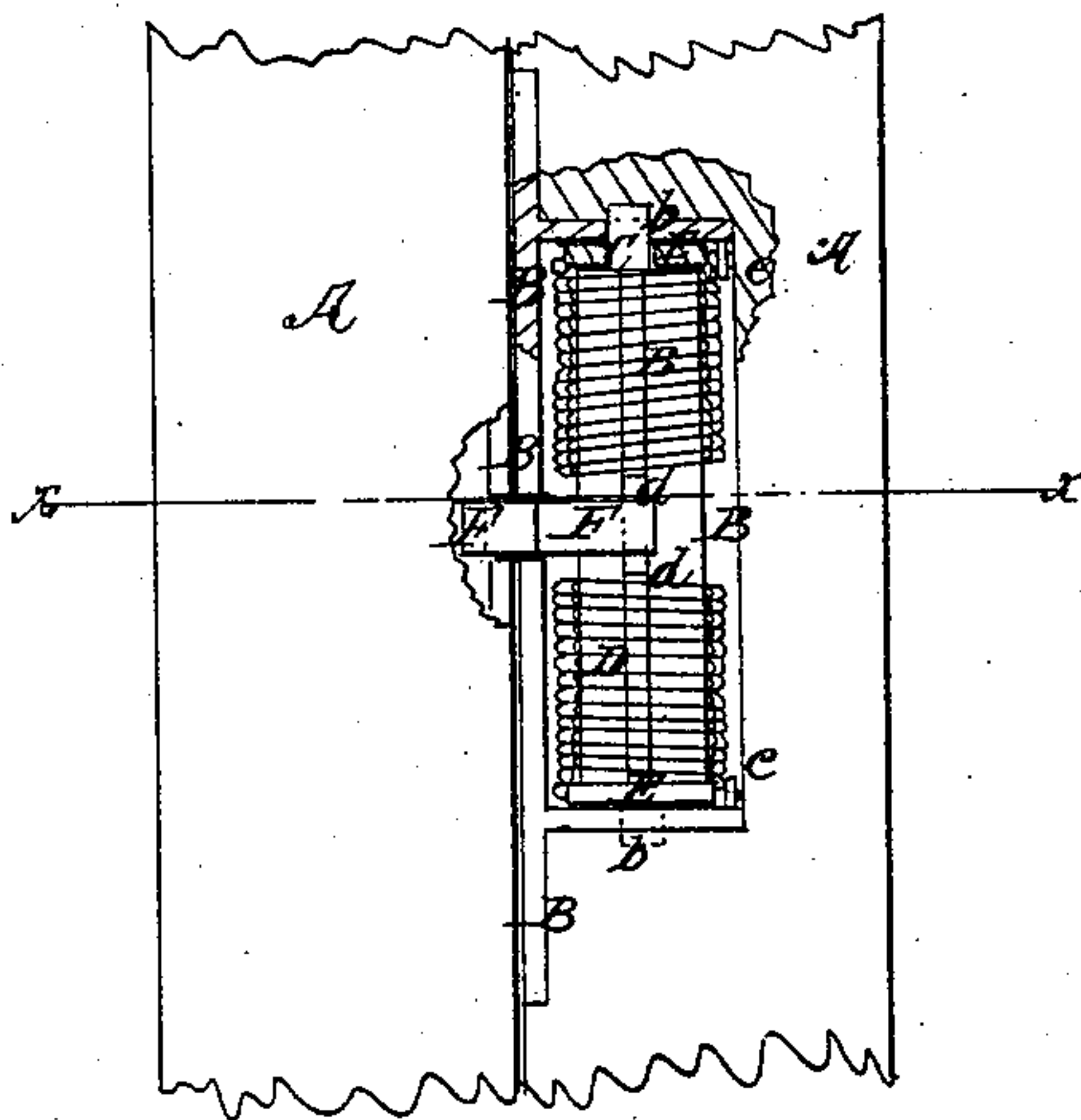
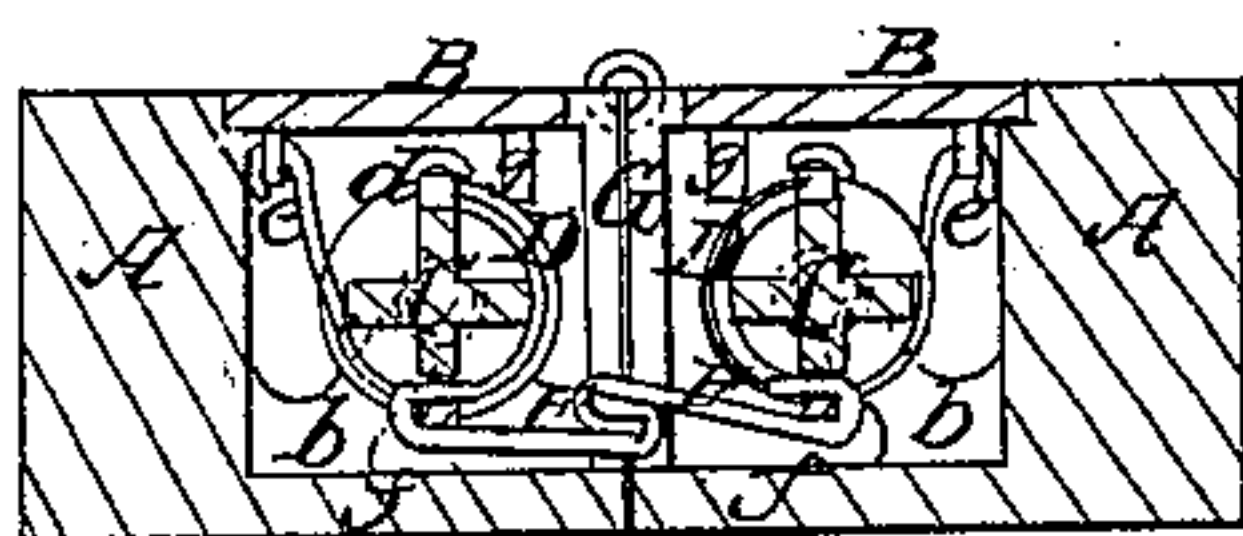


Fig. 2



Witnesses:
J. A. H. H. H. H.
J. A. Service

Inventor:
E. Stimson
By Munnell &
Attorneys

United States Patent Office.

ENOS STIMSON, OF MONTPELIER, VERMONT.

Letters Patent No. 71,081, dated November 19, 1867.

IMPROVED DOOR AND GATE-SPRING.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ENOS STIMSON, of Montpelier, in the county of Washington, and State of Vermont, have invented a new and improved Door and Gate-Spring; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a door and gate-spring for holding a door or gate either open or closed. It consists of four spiral springs, set on two (2) rock-shafts, to which one end of each of the spirals coiled upon it is secured, the other ends being attached to the main casting or frame. At the ends attached to the main casting the springs rest on loose pulleys, thereby reducing the friction, as the springs do not touch the rollers or rock-shafts between their extremities.

The two shafts are connected by a clasp looped on the shafts, and fastened by a joint, and can be readily detached. A stop on the casting prevents the clasp, when detached, from being drawn out of reach by the spring. In the accompanying drawings—

Figure 1 is a front view, partly in section, of my spring applied to a door when held closed, and

Figure 2 is a transverse section thereof at line *x x*.

Similar letters of reference indicate corresponding parts.

A A represent the door and post, B the main casting or frame in which the rock-shafts C C are journaled in slots *b b*. D D are four (4) spiral springs set on the rock-shafts C C, to which, at *d d*, one end of each spring is secured; the other end, after coiling upon the loose pulley E, being secured to the main casting at *e*. The loose pulleys E, by keeping the springs D off the shafts C, serve to diminish the friction and wear of the springs. Clasps F loop on to the rock-shaft at *f*, and hook into each other, so as to be readily disconnected, and will then set back into the door or post sufficiently to be out of the way, the stops *g* arresting the unwinding of the springs by catching the rock-shafts at *d*, and so prevent the clasps from being withdrawn out of reach. The clasps work through the slot G, and thus the greatest pressure on the door is when it is shut, keeping it closed, the spring being then at its greatest tension, relaxing more and more as the door opens, until it is right back to the post, which is the dead-point.

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

1. The springs D and rock-shaft C, in combination with the slotted main castings B, substantially as described, in combination with the clasps F, in manner and for the purposes substantially as herein set forth and described.

2. The loose pulleys E, in combination with the springs D and rock-shaft C, substantially as herein shown and described.

3. The stop *g*, in combination with the main castings B and rock-shafts C, substantially as herein set forth and described.

ENOS STIMSON.

Witnesses:

GEO. P. RIKER,
ZEBINA M. CAMP.