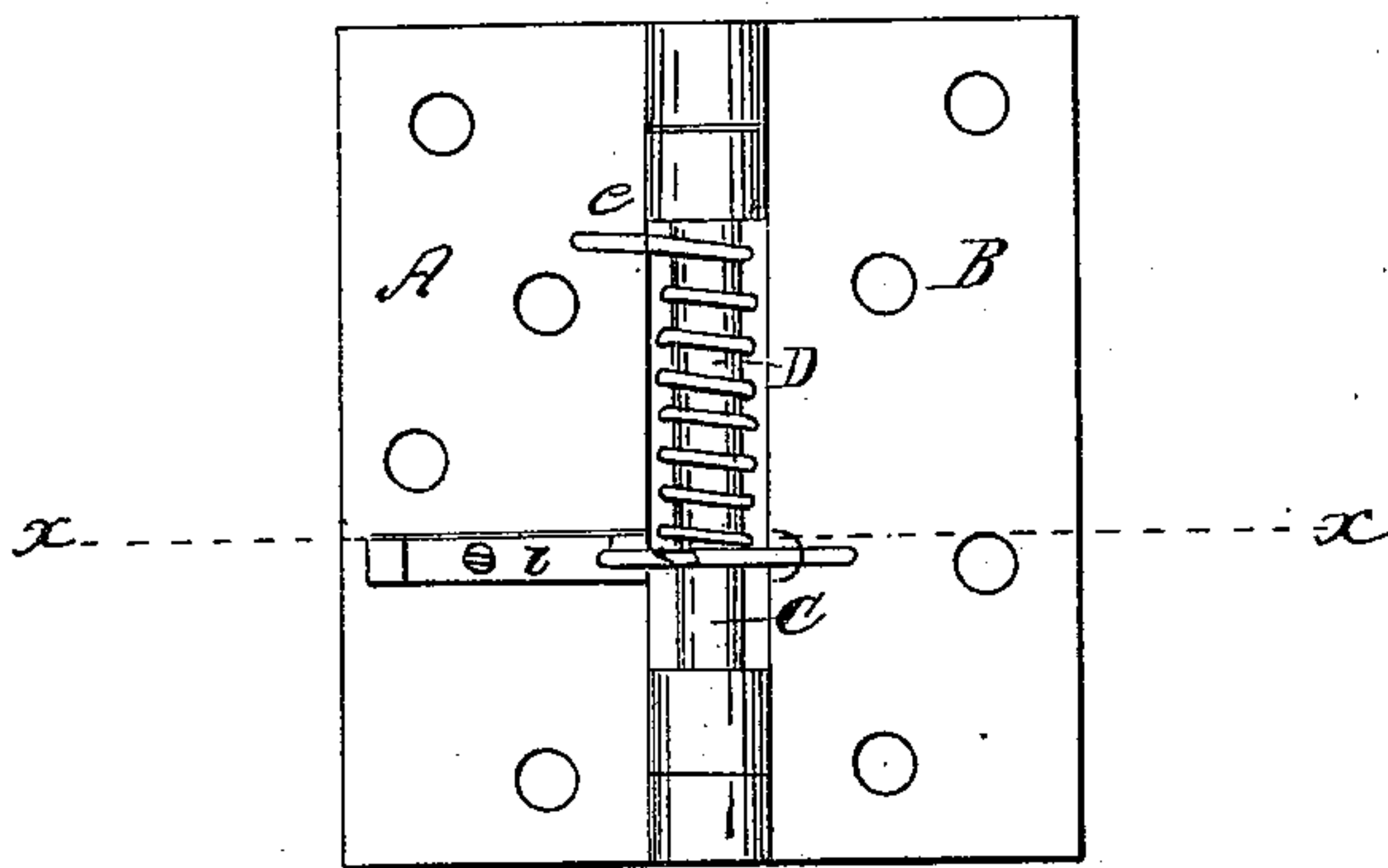
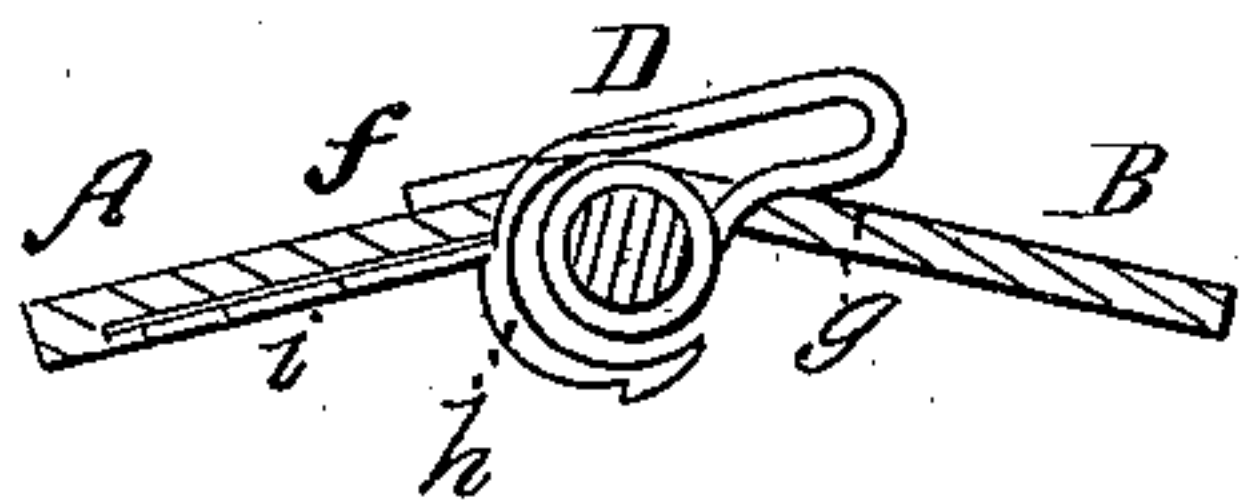


*W. Wells,*  
*Spring Hinge,*  
*No 84,240, Patented Nov. 17, 1868.*

*Fig. 1.*



*Fig 2.*



*Witnesses:*  
*Mrs A. Morgan*  
*E. C. Cotton.*

*Inventor:*  
*W. Wells.*  
*per Muny &*  
*Attorneys.*

# United States Patent Office.

WILLIAM WELLS, OF ASHTABULA, OHIO.

Letters Patent No. 84,240, dated November 17, 1868.

## IMPROVEMENT IN SPRING-BUT.

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, WILLIAM WELLS, of Ashtabula, in the county of Ashtabula, and State of Ohio, have invented a new and improved But-Hinge; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those 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 an improvement in butts for hanging doors, gates, and for similar uses, whereby such doors or gates are made self-closing, by the action of a spiral spring; and the invention consists in the arrangement of the ratchet-teeth and adjustable pawl, for the purpose of rendering the spring upon the hinge operative or inoperative, as described.

Figure 1 is a side view of the but, showing the spiral spring in place, but represented with the spring held by the sliding pawl, and as not acting on the wings of the but.

Figure 2 is a cross-section of fig. 1, through the line *x x*.

Similar letters of reference indicate corresponding parts:

A B represent the wings of the but.

C is the centre pivot.

The wings of the but are so constructed, and the but is so formed, that the central pivot C is left bare in its middle portion, as seen in the drawing, and around this portion there is coiled a wire spring, D.

One end of this wire spring laps over on to the back of the wing A, as seen in dotted lines in fig. 1, at *e*, and

in fig. 2, at *f*, thereby acting upon that wing when the spring is in action.

The other end of the spring is bent so that it acts upon the other wing, B, at the point *g*, (seen in fig. 2.)

The spring bears upon the points *e* and *g* at all times, to render the door or gate self-closing, as it is so adjusted that the opening of the door strains it or increases its tension, while its reaction closes the door.

For the purpose of suspending or preventing the action of the spring, so that the door or gate may be left open or swing free, as when hung by the ordinary but, I turn the end of the spring inward, and around the pivot, and form therein one or more ratchet-teeth, as seen at *h*, fig. 2.

*i* is an adjustable pawl, which slides in a recess in the wing A, the end of which engages with the ratchet-teeth when it is pushed forward, as seen in the drawing, in which position it holds the spring, and prevents the point *g* from acting on the wing B, thus allowing the but and the door to open and close without being acted upon by the spring.

By drawing back the pawl, the force of the spring is exerted on the but, and the door or gate is made self-closing, as stated above.

I claim as new, and desire to secure by Letters Patent—

The pawl *i* and the ratchet-teeth *h*, when arranged substantially as and for the purposes herein shown and described.

Witnesses:

E. A. PIERCE,  
WM. HOUDIT.

WILLIAM WELLS.