J. HARRINGTON.
Spring-Hinge.

No. 196,355. Patented Oct. 23, 1877.

Fig: 1.

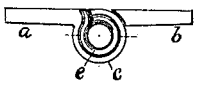


Fig: 2.

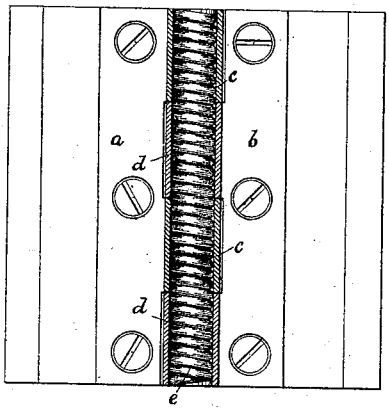
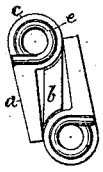


Fig: 3.

Fig: 4.



Witnesses.
E. C. Perkins.
F. J. Pratt.

Inventor.
John Harrington
by Crosby & Gregory Attys

UNITED STATES PATENT OFFICE.

JOHN HARRINGTON, OF RYDE, ISLE OF WIGHT, ENGLAND.

IMPROVEMENT IN SPRING-HINGES.

Specification forming part of Letters Patent No. **196,355**, dated October 23, 1877; application filed September 17, 1877; patented in England, April 26, 1876, for fourteen years.

To all whom it may concern:

Be it known that I, JOHN HARRINGTON, of Ryde, Isle of Wight, England, have invented an Improvement in Spring-Hinges, and for which I have previously taken out English Letters Patent No. 1,758 of 1876, of which the following is a specification:

This invention relates to spring-hinges for use in connection with doors, gates, &c.; and consists in the combination, with the leaves or halves of a fast-joint hinge, of a spiral spring, connected at its opposite ends with the two hinge-leaves, the spring alone serving as the pintle, as hereinafter more fully described and claimed.

Figure 1 represents my improved hinge in top view, it being opened; Fig. 2, a front view when opened; Fig. 3, a top view, the hinge being closed; and Fig. 4, a modification, showing the invention applied to a double hinge.

The two leaves *a b* of the hinge and their knuckles *c d* are made as in common fast-joint hinges or butts. The plates will have a greater or less number of knuckles, according to the size and purpose of the hinge.

Instead of fastening the leaves together by the insertion of a rod or pintle through the knuckles, as commonly done, I employ a spiral spring, *e*, and connect it at top with one leaf, *a*, and at bottom with the other leaf, *b*, so that the torsional action of the spring will have a tendency to retain the hinge closed or shut.

A hinge so constructed will be perfectly self-closing, and may be advantageously used in various places.

I do not, broadly, claim the use of a spiral spring at the joint of a hinge to make it self-closing when such spring is used with a pintle or with plug-caps.

This spiral-spring pintle is specially advantageous when applied to double self-closing hinges, adapted to open from either side in either direction, as in Fig. 4.

I claim—

As a new article of manufacture, a self-closing spring-hinge without pintle, the leaves *a b* of which are held together by means of a coiled spring, *e*, extended through the knuckles *c* of the leaves, and connected at top with one leaf, and at bottom with the other leaf, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN HARRINGTON.

Witnesses:

G. W. GREGORY,

W. J. PRATT.