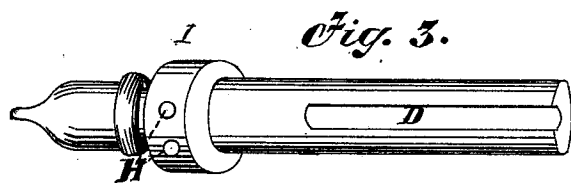
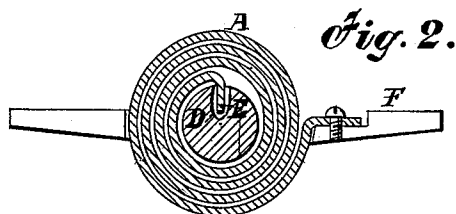
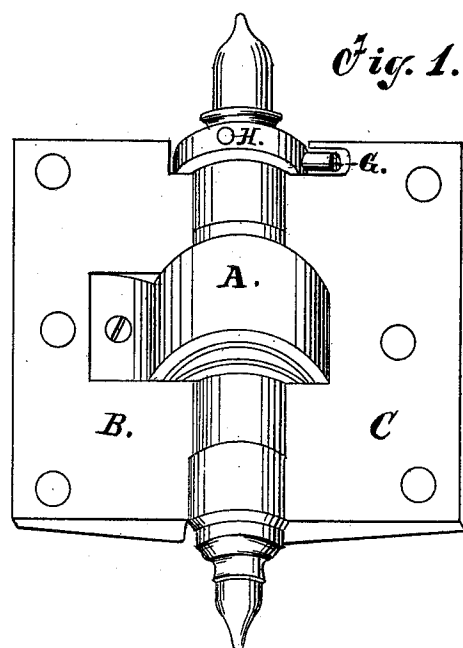


J. BREWER.  
Spring-Hinge.

No. 198,533.

Patented Dec. 25, 1877.



Witnesses.  
Frank S. Spring  
Henry W. Stackpole,

Inventor.  
John Brewer  
Per Stackpole  
att'y.

# UNITED STATES PATENT OFFICE.

JOHN BREWER, OF BROOKLYN, NEW YORK, ASSIGNOR TO JOSHUA G. REYNOLDS, OF ELIZABETH, NEW JERSEY.

## IMPROVEMENT IN SPRING-HINGES.

Specification forming part of Letters Patent No. **198,533**, dated December 25, 1877; application filed November 2, 1877.

### *To all whom it may concern:*

Be it known that I, JOHN BREWER, of the city of Brooklyn, in Kings county and State of New York, have invented certain new and useful Improvements in Spring-Hinges, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of my improved spring-hinge. Fig. 2 is a cross-section of the same cut through the spring. Fig. 3 is a perspective view of the pintle.

The invention consists in the details of construction, as pointed out in the claim.

A is the spring. B and C are the leaves of the hinge. D is a groove in the pintle, into which the end E of the spring A is inserted. The end F of the spring A is attached to the leaf B of the hinge, in the ordinary way, by a screw. The tension on the spring is obtained by turning the pintle, and is held by means of the pin G, entering one of the holes H, and resting against the side of the leaf C.

The object and advantage of my invention are, that in either a loose or tight hinge, should the spring break, it can be removed without taking the leaf of the hinge from the door, by simply removing the pin C, withdrawing the pintle, and unscrewing the spring from the

leaf of the hinge, when the pintle may be put back in place and the hinge used without a spring until another is obtained, which can be put in place by any person. Besides this, is the convenience of putting the hinge on the door, as it can be much more readily done when the hinge can be taken apart and put together while on the door. There is also the advantage of being able to readily remove the door in case of fire, which can be done nearly as readily as with the ordinary loose hinge.

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

The pintle passing entirely through the knuckles of both leaves of the hinge, and furnished with the adjusting-collar H, which forms a part thereof, and with the lengthened slot D, in combination with the central ribbon coil-spring, one end entering the slot D in the pintle, and the other end fastened to the leaf B, the arrangement being such that the withdrawing of the pintle liberates the leaves and spring, all arranged substantially as and for the purpose set forth.

JOHN BREWER.

Witnesses:

RUFUS CHANDLER,  
E. S. HOADLEY.