

No. 822,555.

PATENTED JUNE 5, 1906.

E. L. ROGERS.
SPRING BOX HINGE.
APPLICATION FILED OCT. 24, 1904.

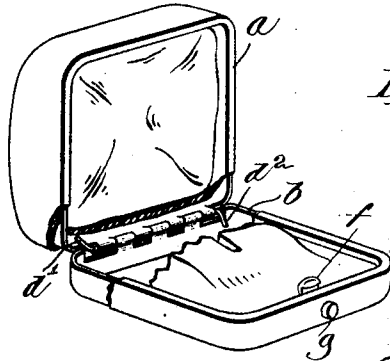


Fig. 1.

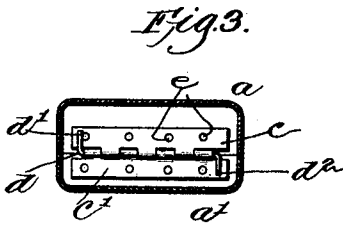


Fig. 3.

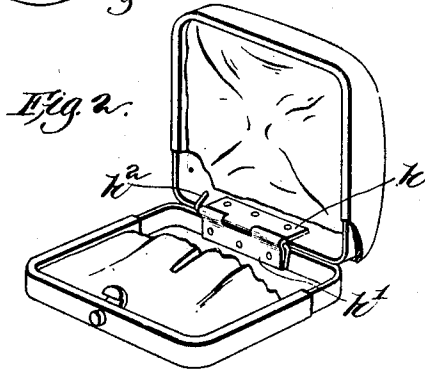


Fig. 2.

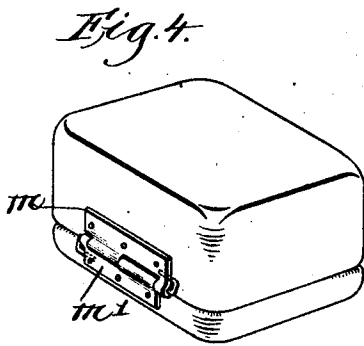


Fig. 4.

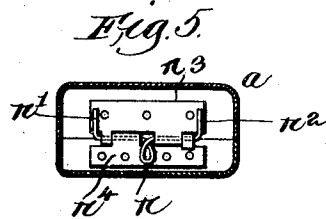


Fig. 5.

Witnesses.
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UNITED STATES PATENT OFFICE.

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SPRING BOX-HINGE.

No. 822,555.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed October 24, 1904. Serial No. 229,735.

To all whom it may concern:

Be it known that I, EDWARD LITTLE ROGERS, a citizen of the United States, residing at Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Spring Box-Hinges, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a box the lid of which is self-opening by or through the operation of a piece of round spring-wire which serves as the pintle for the hinge member uniting the lid to the body of the box.

Figure 1 shows a box such as used by jewelers, the same showing my improvements with the lid open. Fig. 2 shows a different but usual shaped hinge, the box-lid being open. Fig. 3 shows a section through the closed box looking at the hinge, which is longer than shown in Fig. 1, the lid being supposed to be closed. Fig. 4 shows the hinge applied to the exterior of the box; and Fig. 5 is yet another modification showing a different-shaped hinge and spring-pintle, the hinge being shown at the inside of the box and the box closed.

Preferably the lid *a* and bottom *b* of the box will be composed of metal; but they may be composed of any other usual or suitable material, and in practice the lid and body of the box may be covered and also lined with velvet, silk, leather, or any other suitable material.

In accordance with my invention I connect—say with the lid *a*—one half *c* of a hinge, the complementary half *c'* being attached to the body of the box. Each of these hinge-halves have usual notches and projections, the projections being curled over, as represented in Fig. 1, to leave pintle-spaces, and when the projections of one part enter a space of the other part the pintle-holes are put in alignment for the reception of my improved combined pintle and box-opening member *d*. This member is shown as composed of round wire having its ends *d'* bent oppositely, the end *d'* overlapping and coacting with part of the box-lid *a*, while the end *d''* overlaps and coacts with part of the body *b* of the box. These hinge parts may be united with the lid and body of the box in any suitable or usual way—as, for instance, by rivets *e*. It will be seen viewing

Fig. 1, where the box-lid is open, that when the lid is closed pressure will be put upon the ends *d'* and *d''* that will twist, as it were, the wire, so that the latter will act torsionally when the pressure employed to close the lid on the body is relaxed to open the lid promptly. The lid may be kept closed by any usual catch *f*, having a push-head *g*.

In the modification Fig. 2 the hinge part *h*, connected with the lid, has a single projection that enters a notch in the hinge portion *h'*, connected with the body, one portion having one curled portion and the other two curled portions that are interlocked, as common with hinges, and they receive the wire *h''*, having its ends oppositely bent, as provided for wire *d*, Fig. 1.

In the modification Fig. 3 the hinge parts are of such length that the ends *d'* *d''* cross and bear on the hinge rather than on the material of the box.

In the modification Fig. 4 the hinge *m m'* is connected with the exterior of the lid and body and receives the wire, which at its extremity is not only bent at right angles to its length, but, as shown in said figure, the extremities are directed backwardly parallel with the part of the wire serving as the pintle for the hinge.

In the modification Fig. 5 the extremities *n'* and *n''* of the wire are bent in the same direction and cross and coact with the hinge part *n''*, connected with the lid, an offset *n* of said wire between its ends crossing and coacting with the hinge part *n'*, connected with the body, so that in Fig. 5 the wire presents oppositely-directed portions that are acted upon as the lid is closed to twist the wire about its longitudinal axis.

Prior to my invention I am not aware that a single wire having oppositely-bent portions has ever been combined directly with the hinge members connecting the lid of a box with its body, said wire not only serving as the pintle for the hinge, but also to automatically open the box, due to torsional strain put into the wire when closing the lid, that it may be fastened in closed condition to the body.

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

In a box, a body, a lid, a hinge member secured to the body, a complementary hinge part secured to the lid, and a wire pintle pivotally connecting said parts, said pintle hav-

ing its two ends bent parallel with each other
to present offset portions to engage the inner
wall of the lid and having intermediate of its
ends a portion bent laterally in the opposite
5 direction to engage the inner wall of the body
of the box whereby when the lid is closed the
pin is put under torsional strain.

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

EDWARD LITTLE ROGERS.

Witnesses:

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MARGARET A. DUNN.