

UNITED STATES PATENT OFFICE.

CHRISTIAN HIERING AND ALBERT FULLER, OF NEWARK, NEW JERSEY, ASSIGNORS
TO J. E. MERGOTT COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW
JERSEY.

MATCH-BOX.

956,092.

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To all whom it may concern:

Be it known that we, CHRISTIAN HIERING and ALBERT FULLER, citizens of the United States, residing in the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Match-Boxes; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make, construct, and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in boxes for matches or other articles, the principal purpose being to provide a novel construction of boxes or receptacles, which is especially adapted for the placing of matches or the like therein, the box or receptacle being provided with means for opening the box, requiring some ingenuity on the part of the operator before solving the mystery of opening the same.

This invention therefore has for its main object, to provide a trick or puzzle box, and furthermore to provide a novel construction of box or receptacle for matches or other articles.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a box or receptacle, made according to the principles of this invention, the lid or cover shown in its raised or open position. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a transverse vertical section of the same. Fig. 4 is a sectional plan view taken on line $x-x$ of Fig. 1. Fig. 5 is a similar view taken on line $x-x$ of Fig. 7. Fig. 6 is a side elevation of the closed box with the opening means removed. Fig. 7 is a side elevation of the box complete. Figs. 8 and 9 are front and side elevations of the releasing spring employed in connection with the cover; and Figs. 10 and 11 are similar views illustrating modifications of the same.

Similar letters of reference are employed in all of the said hereinabove described views, to indicate corresponding parts.

In the said drawings, the reference letter a indicates the complete box, the same comprising a main body a' , preferably formed

with an upper bead or projection a^2 , and a lower bead or projection a^3 substantially as illustrated. The lower end of said body a' is closed by means of a cap b , and its upper end forms an opening or mouth c . The said body a' may be provided on its outer surface with a suitable covering d , which may be leather, celluloid or any other suitable material, or, if desired, such covering may be entirely dispensed with. Suitably secured in the sides of said body a' , is a pintle d' , upon which is pivoted by means of suitably disposed perforated ears or lugs d^3 , a lid or cover e . Within the chambered portion of said lid or cover e is secured near the catch portion of the lid, by means of a rivet e' , or in any other suitable manner, a leaf-spring e^2 , bent to approximately conform to the inner surface of the top of said lid or cover, but capable of a slight movement in the chamber of said cover, said spring having a tongue or stud e^3 extending at right-angles or approximately so from the body of said spring, and located directly in front of the pintle d' .

Suitably secured on the inside of the main body, is a rigid plate f , the upper end of which is provided with a projection or stop f' , for the reception of the end of the tongue or stud e^3 of the leaf spring e^2 , said projection or stop f' being in forcible contact with said tongue or stud e^3 thereby retaining the lid or cover e in its relation over the mouth of the box.

It will be evident that by securing the leaf-spring e^2 within the lid or cover e , a long spring may be employed which, although it has but a slight movement within the chambered portion of the lid or cover, will have an increased movement at its tongue or stud e^3 . The said tongue or stud thus exerts a positive and increased pressure upon the rigid plate f , whereby the lid or cover flies back with force and is rigidly held in its open position. The said main body a' is provided with an opening g and a holding member or loop g' forced out from the metal as illustrated in the drawings, upon the interior surface thereof. In this holding member or loop is slipped and held therein, by means of the cut-away portions, the holding tongue h of the releasing spring i , as represented in Fig. 2, the said spring being made in the manner of

a flat and plate-like body, having a push piece i' , either integrally formed thereon, or suitably secured thereto, in any well-known manner, which push piece in its normal
 5 initial position extends into the opening j formed in the main body, the shape of said opening j corresponding to the shape of the push piece i' of the releasing spring i . The upper part of the said releasing spring i
 10 is provided with a recess k , adapted to receive the nib or projection k' , of the cover or lid e to retain said cover in a locked position, as indicated in Figs. 6 and 7 of the drawings.

15 In forming the opening j in the main body a' of the box for the reception of the push-piece i' of the releasing spring i , two lateral extensions l are formed in said opening, the space between the extensions being
 20 of approximately the same width as the width of the releasing spring i , and extending to within a short distance of the top of the opening j , said lateral extensions forming a support for the lower half of the push
 25 piece i' , but allowing the upper half of the push piece i' to be unsupported, so that when pressure is applied to the upper half of the push piece i' , the releasing spring i is forced inwardly and out of holding en-
 30 gagement with the projection or nib k' of the cover e , thereby causing said cover to fly back with force. Those portions of the outer surface of the said main body a' between the beads or projections a^2 and a^3 are
 35 preferably covered with a suitable fabric d , leather, imitation leather, or any other material, the same being secured to the metal body a' in any well-known manner.

The preferred form of our invention is particularly illustrated in Figs. 5 and 7 of
 40 the drawings, in which the covering d , which may consist of leather, celluloid, or any suitable fabric, hides from view, when leather or similar material is used, or partially hides from view when transparent ma-
 45 terial, such as celluloid or similar material is used, the push piece i' , although the covering d may be entirely dispensed with as illustrated in Fig. 1. In the case where
 50 celluloid or a transparent material is used to cover the main body of the box, we find it convenient to decorate the push piece by forming thereon any suitable design, in which case, the transparency of the cellu-
 55 loid or similar material serves to locate the push piece of the releasing spring.

The structure illustrated in Fig. 6, in which the opening j in the main body a' of the box is provided with lateral extensions
 60 l , forms a partial support for the push piece i , and in order to operate the releasing spring in order to cause the lid e of the box to fly open, pressure must be applied to the extreme upper edge of the push piece. This
 65 structure reduces the liability of accidentally

opening the box while in the wearer's pocket to a minimum.

We claim:

1. A box or receptacle for matches or similar articles, comprising a main body provided with an opening, a releasing spring catch extending into said opening, means extending into said opening and integral with said box for limiting the inward movement of said spring catch, a receiving portion on
 70 said spring catch, a spring actuated lid connected with the mouth of said box, normally in engagement with said receiving portion of said spring catch and means arranged in said lid for forcing the same to and retain-
 75 ing it in its open position. 80

2. A box or receptacle for matches or similar articles, comprising a main body provided with an opening, a releasing spring catch extending into said opening, a push
 85 piece on said spring catch, means extending into said opening and integral with said box for limiting the inward movement of said spring catch, a receiving portion on said spring catch, a spring actuated lid connected
 90 with the mouth of said box, normally in engagement with said receiving portion of said spring catch and means arranged in said lid for forcing the same to and retaining it in its open position. 95

3. A box or receptacle for matches or similar articles, comprising a main body provided with an opening, a releasing spring catch extending into said opening, a push
 100 piece on said spring catch, means extending into said opening and integral with said box for limiting the inward movement of said spring catch and push piece, a receiving portion on said spring catch, a spring actuated
 105 lid connected with the mouth of said box, normally in engagement with said receiving portion of said spring catch and means arranged in said lid for forcing the same to and retaining it in its open position.

4. A box or receptacle for matches or similar articles, comprising a main body having
 110 a mouth, a lid arranged over said mouth, means in said lid for throwing the same in its open position, a fixed plate in said body provided with a stop for retaining the lid
 115 in its open position, a releasing spring catch in the side of said body, normally in holding engagement with said lid, a push-piece on said spring catch, said spring catch being
 120 provided at its lower end with a notched tongue piece passing through loops integral with the box body, whereby said spring catch is secured to said box body, an aperture in the box body for the reception of the push
 125 piece, and means integral with the box body and extending into said aperture for limiting the inward movement of said push piece and spring catch.

5. A box or receptacle for matches or similar articles, comprising a main body having 130

a mouth, a lid arranged over said mouth, means in said lid for throwing the same in its open position, a fixed plate in said body provided with a stop for retaining the lid in its open position, a releasing spring catch in the side of said body, normally in holding engagement with said lid, a push-piece on said spring catch, said spring catch being provided at its lower end with a notched tongue piece passing through loops integral with the box body, whereby said spring catch is secured to said box body, an aperture in the box body for the reception of the push piece,

means integral with the box body and extending into said aperture for limiting the inward movement of said push piece and spring catch and a covering for said box extending around the same and covering said push piece. 15

This specification signed and witnessed this 21st day of April 1908. 20

CHRISTIAN HIERING.
ALBERT FULLER.

Witnesses:

J. A. RAUSEHOUSEN,
MABELLE SERLE.