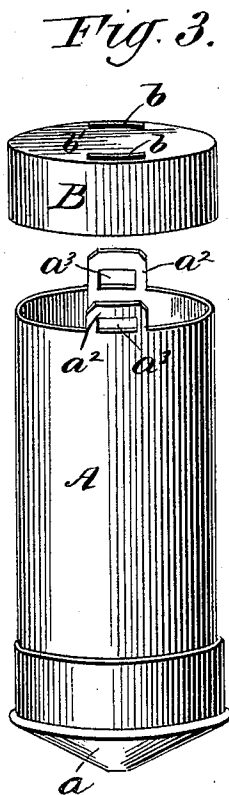
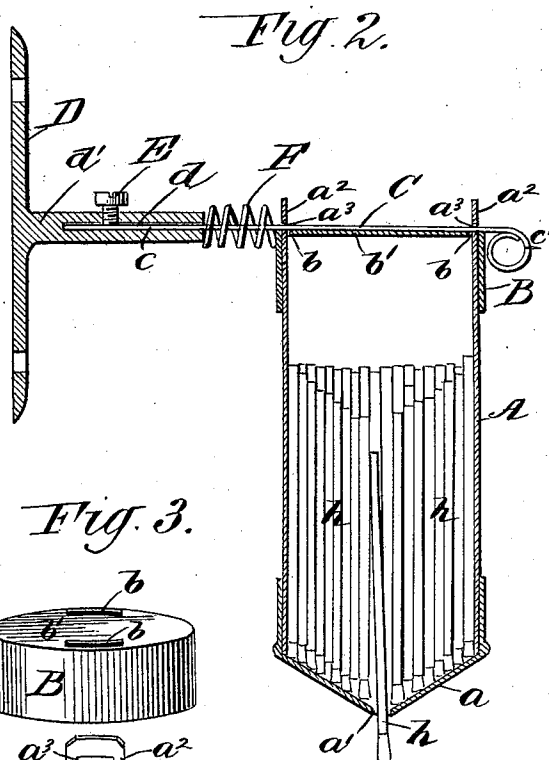
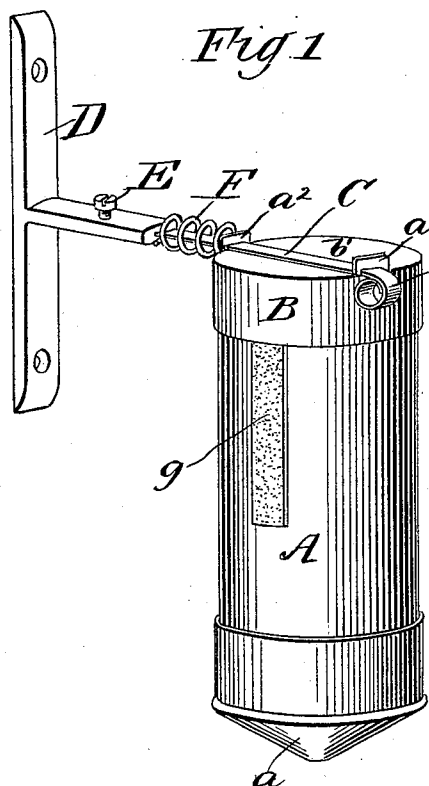


(No Model.)

E. J. COTTERILL.
MATCH SAFE.

No. 582,458.

Patented May 11, 1897.



WITNESSES:
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UNITED STATES PATENT OFFICE.

EDMUND JAMES COTTERILL, OF LEHMAN, PENNSYLVANIA.

MATCH-SAFE.

SPECIFICATION forming part of Letters Patent No. 582,458, dated May 11, 1897.

Application filed September 24, 1896. Serial No. 606,874. (No model.)

To all whom it may concern:

Be it known that I, EDMUND JAMES COTTERILL, a subject of the Queen of England, and a resident of Lehman township, county of Pike, and State of Pennsylvania, have invented certain new and useful Improvements in Match-Safes, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to that class of match-safes which are adaptably operated to automatically deliver the match; and the object of my invention is to provide a simple and improved match-safe of this class which will possess advantages in point of convenience, positive operation, effectiveness, and general efficiency.

In the drawings, Figure 1 is a perspective view of a match-safe embodying my improvements. Fig. 2 is a vertical transverse sectional view of the same; and Fig. 3 is a perspective view of the body of the device, showing the cover detached.

Referring to the drawings, A designates the body of the device, which forms the match safe or reservoir proper and is preferably of cylindrical form.

The safe is provided with a downwardly-convergent bottom *a*, forming an incline terminating at the central opening or orifice *a'* of a size adapted for the passage of a single match.

B designates the cover, which closes the top end of the cylindrical safe A.

The safe is mounted or suspended in vertical position upon a spring mechanism, and to provide for the convenient connection of the safe with the supporting-spring the side walls of the body are formed at the top with diametrically opposite vertical extensions a^2 a^3 , which are received by corresponding slots *b b* in the top plate *b'* of the cover. The projecting extensions or flanges a^2 a^3 are provided with transverse slots a^3 , which are adapted to receive a flat spring-plate C, the relative arrangement being such that the spring-plate passes over the cover B and thus locks the latter in position and at the same time supports and carries the depending cylindrical body A.

The spring-plate C projects on a horizontal plane, as shown, and has its rear end *c* removably secured in the longitudinal slot *d* in a horizontal arm *d'*, projecting from the vertical plate D, adapted to be secured in any suitable manner against the wall or at any other desired point.

The plate D and its projecting arms *d'* thus form the main supporting-bracket, and the arm carries the set-screw E, working into the slot *d* and adapted to bind the inner end of the spring-plate to secure the same in position.

To enhance the spring action of the device, I prefer to mount a coil-spring F upon the spring-plate C between the end of the arm *d'* and the side of the suspended safe-body A. The outer end of the spring-plate C is provided with a knob or head *c'*, formed in any suitable manner, preferably by curving the end of the plate, as shown, which knob or head retains the safe-body upon the supporting-spring and is also adapted to facilitate the manipulation of the latter.

Exteriorly upon the side of the body A, I provide a friction-surface *g*, the location of the same preferably being at the point at right angles to the supporting-spring C, so that there will be no lateral spring movement of the body when the match is struck against the friction-surface.

In practice the matches *h* are placed vertically in the cylindrical body A, so that they rest at their lower ends upon the convergent inclined bottom *a* and will be successively fed through the orifice or opening *a'*. The automatic feed of the matches is accomplished simply by tapping upon the spring-suspended body, which will cause an automatic shaking movement of the latter, by which a match is fed to the bottom orifice or opening and will automatically drop therefrom by gravity.

To fill the body A with matches, it is only necessary to loosen the retaining-screw E and withdraw the spring-plate C from engagement with the supporting-bracket and with the cylindrical body, when the cover B may be readily removed to enable the convenient filling of the safe. The parts of the device are then assembled together, so that the body A is again suspended in proper operative position upon the spring.

Having thus described my invention, what

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

1. A match-safe, comprising a vertically-suspended cylindrical body having a convergent bottom terminating in a central orifice or opening, in combination with a horizontal spring-plate upon which said body is suspended, substantially as set forth.

2. As an improvement in match-safes, the combination, with the vertically-mounted body having diametrically opposite slotted extensions at the top, and the cover slotted to receive said extensions, of a flat spring-plate supporting and carrying said body and received by the slotted extensions of the latter, substantially as and for the purpose set forth.

3. An improved match-safe, comprising a supporting-bracket, a flat spring-plate projecting horizontally therefrom, a vertically-mounted body suspended from and supported by the projecting end of the said spring-plate, and a coil-spring mounted upon the spring-plate between the end of the supporting-bracket and the top portion of the suspended body, substantially as and for the purpose set forth.

4. In a match-safe, the combination, with a projecting spring-plate and a body suspended in vertical position therefrom, of an auxiliary coil-spring carried upon the inner end of the spring-plate adjacent to the top portion of the body, substantially as set forth.

5. An improved match-safe, comprising a

supporting-bracket embodying a horizontal slotted arm, a spring-plate secured in said slot by set-screw and projecting horizontally from the bracket, a body portion suspended in vertical position upon the projecting end of the spring-plate, and a cover for said body engaged by the suspending spring-plate and locked into position thereby, substantially as set forth.

6. The herein-described improved match-safe, comprising a supporting-bracket embodying a slotted projecting arm, a cylindrical suspended body having a convergent bottom terminating in an orifice or opening and provided with projecting slotted extensions at the top, a cover for said body provided with slots receiving said extensions, a flat spring suspending-plate passing through the slots in said extensions over the cover and having its inner end secured in the slotted arm of the bracket by set-screw, and a supplementary coil-spring mounted upon the spring-plate between the end of the arm of the bracket and the top portion of the suspended body, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 21st day of September, 1896.

EDMUND JAMES COTTERILL.

Witnesses:

GEORGE M. LAUBSLINE,
FRANK LYBOLT.