

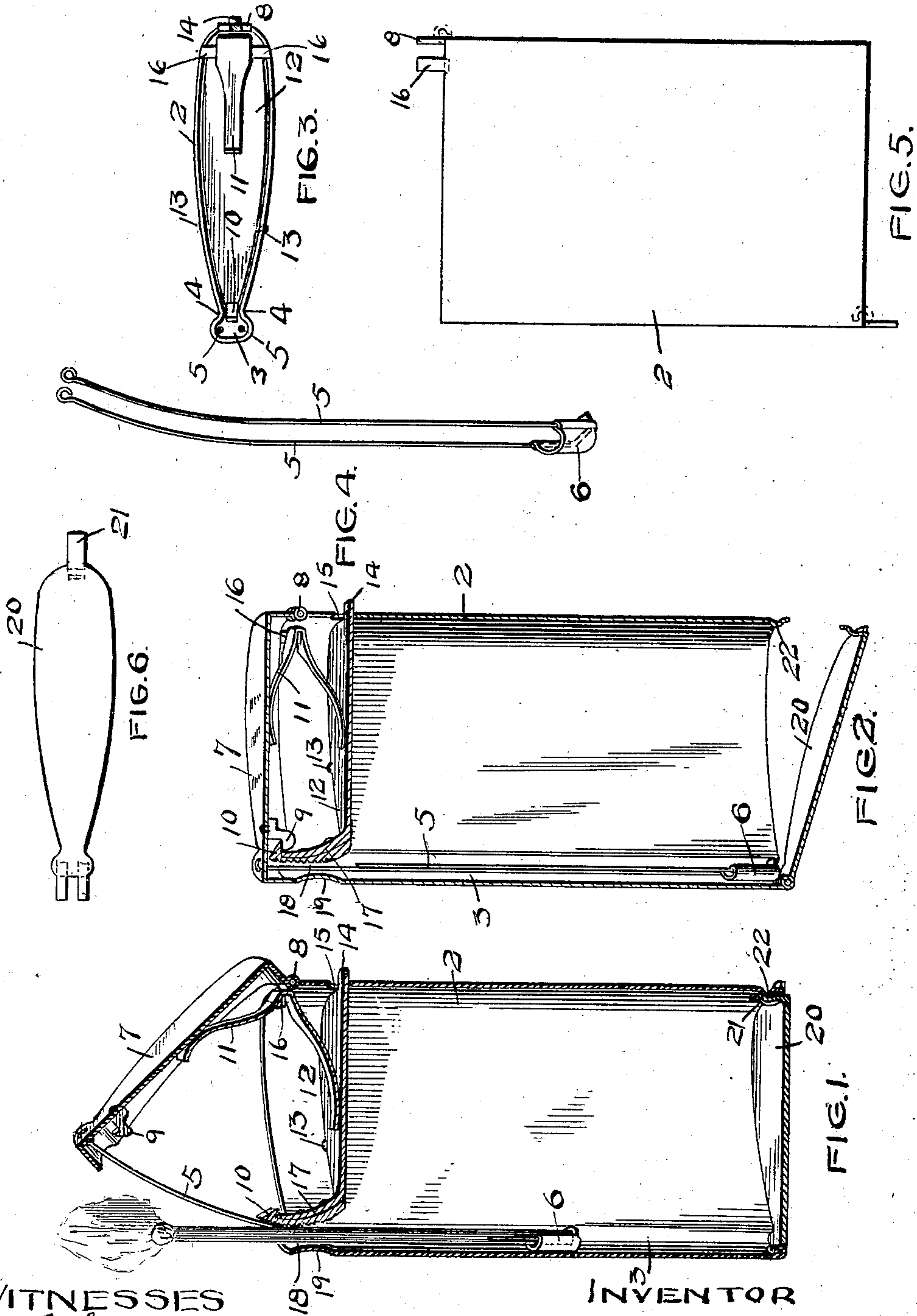
No. 664,576.

Patented Dec. 25, 1900.

G. R. ODEAN.
MATCH BOX.

(Application filed Dec. 11, 1899.)

(No Model.)



WITNESSES

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BY

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UNITED STATES PATENT OFFICE.

GUSTAVUS R. ODEAN, OF MINNEAPOLIS, MINNESOTA.

MATCH-BOX.

SPECIFICATION forming part of Letters Patent No. 664,576, dated December 25, 1900.

Application filed December 11, 1899. Serial No. 739,934. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVUS R. ODEAN, of the city of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Match-Boxes, of which the following is a specification.

This invention relates to pocket match-boxes; and one object of the invention is to provide a match-box that is adapted is automatically eject and light a match when a catch upon the box is operated.

A further and particular object of the invention is to provide an automatic match-lighting box of a simple and cheap construction.

The invention consists in a box for matches, in combination with a striker therein and a spring-actuated lid or lever having an ejector attached to it, which latter upon the release of the lid or lever withdraws or ejects a match from the box, forcing the same past the striker to ignite the match.

The invention also consists in constructions and combinations of parts, all as hereinafter described, and particularly pointed out in the claims.

The invention will be more readily understood by reference to the accompanying drawings, in which—

Figure 1 is a sectional perspective view of a match-box embodying my invention. Fig. 2 is a similar view thereof, showing the spring-actuated lid in its closed position. Fig. 3 is a view of the top of the box with the lid removed. Fig. 4 is a perspective view of the ejector, enlarged. Figs. 5 and 6 are respective views of the side and bottom blanks of the box.

As shown in the drawings, I prefer to form the box 2 with a longitudinal channel or tube 3 in one edge thereof made by forming the groove 4 in the sides of the box. The opening or slot between the inner walls of the box at the grooves 4 is sufficiently large to admit one match at a time to the longitudinal groove or tube 3. In this tube is the ejector, comprising one or two (preferably two) wires 5, the lower ends of which are joined by the footpiece 6. The upper ends are attached to the lid 7, that is attached to the box by a hinge 8.

9 is a catch upon the lid or lever 7, and 10 is a catch in the box.

11 is the spring for the cover.

A match that falls into the tube portion 3 of the box will rest upon the foot 6 when the lid is closed, and when the lid is freed by the disengagement of the catches 9 and 10 the lid will fly open and will draw out the match. I prefer to make the catch 10 integral with the striker, though this is not necessary, as the parts may be independent. The catch-lever 12 is made to completely fill the top of the box and has the two studs 13 extending through the sides of the box as pivots. The rear end of the lever is provided with a lug 14, extending through a slot 15 in the back of the box, whereby the lever may be lifted to throw the latch 10 out of engagement with the latch 9. The spring 11 is preferably a flat spring, substantially V-shaped, held by lugs 16, turned from the top of the box, the spring being caught between the same and the hinge edge. The lower leaf of the spring presses upon the lever 12, serving as the spring therefor. The forwardly upwardly turned end 17 of the lever 12, that carries the hook 10, is provided with a roughened surface 18 and forms the striker.

The box may be indented at 19, as shown, if desired, to force the head of the match against the striker; but this may be dispensed with, particularly as the striker is moved and held firmly in the path of the match-head when the lever 12 is raised to release the spring-lid.

If desired, the combined lever and closure 12 may be made removable to permit the filling of the box; but I prefer to provide the box with a hinged bottom 20 for this purpose, the catch 21 being preferably formed integrally with the bottom 20 to engage a projection 22 in the bottom of the box, formed by indenting the sheet metal.

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

1. An automatic match-lighting box, comprising a box provided with a spring-actuated cover, a catch whereby the same is normally held in a closed position, a match-striker, and an ejector arranged in the box attached to and

movable with said cover, and whereby upon the release of the cover a match is ejected from the box.

2. An automatic match-lighting box, comprising a box to contain matches, in combination, with a spring-actuated cover therefor, said cover operating as a lever, a catch normally holding the latter in its closed position, a striker provided in said box, and an ejector arranged in the box attached to said cover and movable therewith upon the release of the cover to eject or force a match from the box past said striker, to ignite the match.

3. An automatic match-lighting box, comprising a box to contain matches, a lid or cover hinged thereon, an ejector comprising wires attached to the free end of the cover and extending into the box, a footpiece thereon within the box, a striker, a catch for said lid or cover, and a single spring operating said catch and cover, substantially as described.

4. An automatic match-lighting box, comprising a box provided with a hinged spring-actuated lid or cover, a striker provided within the box, an ejector, and a movable lid or cover catch forming a closure for the top of the box when said spring-actuated cover is open, substantially as described.

5. An automatic match-lighting box, comprising a box having a tube portion, an ejector slidable in said tube portion, a spring-actuated lid for said box whereto said ejector is connected and by which it is operated, and a combined catch, closure and striker provided in the upper part of the box, substantially as described.

6. An automatic match-lighting box, comprising a box having a longitudinal tube portion, a spring-actuated ejector included and slidable longitudinally within the walls of said tube portion and adapted to engage the ends of the matches as they enter said tube portion one at a time, a catch whereby said

ejector is normally held, and a striker, substantially as described.

7. An automatic match-lighting box, comprising a box having a tube portion, a spring-actuated lid or cover for said box, an ejector slidable in said tube portion and connected with said cover, a striker provided in the path of said ejector, and a catch whereby said ejector and cover are normally held, substantially as described.

8. An automatic match-lighting box wherein the matches are longitudinally arranged, comprising a box, a hinged spring-actuated lid or cover therefor, an ejector operating longitudinally within said box, and a combined cover-catch and striker provided near said ejector, substantially as described.

9. An automatic match-lighting box, comprising a box having a tubed or recessed portion in its walls adapted to receive matches one at a time, a spring-actuated ejector comprising wires 5 and a footpiece 6 arranged within said tubed portion, a striker provided near said ejector and a catch whereby said ejector is normally held, substantially as described.

10. An automatic match-lighting box, comprising a box adapted to contain matches, a spring-actuated lid or cover therefor, an ejector provided in said box and connected with said cover, a lever 12 provided in the top of the box beneath said cover, and a combined cover-catch and match-striker provided on said lever near said ejector, substantially as described.

In testimony whereof I have hereunto set my hand, this 28th day of November, 1899, at Minneapolis, Minnesota.

GUSTAVUS R. ODEAN.

In presence of—

C. G. HAWLEY,
M. E. GOOLEY.