

J. H. ROYER.
 POCKET MATCH SAFE.
 APPLICATION FILED DEC. 8, 1910.

998,399.

Patented July 18, 1911.

2 SHEETS—SHEET 1.

FIG. 1

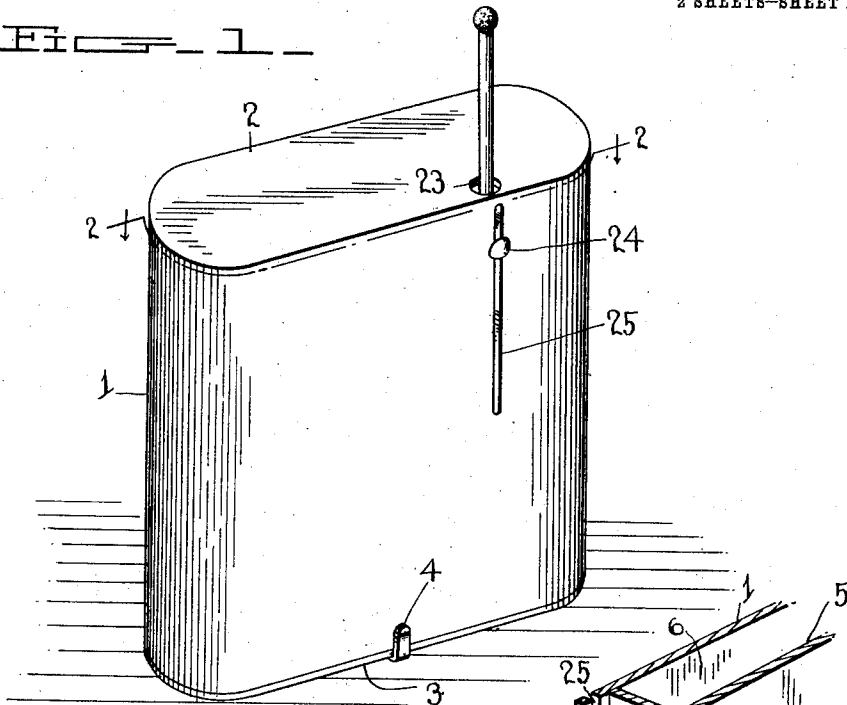


FIG. 2

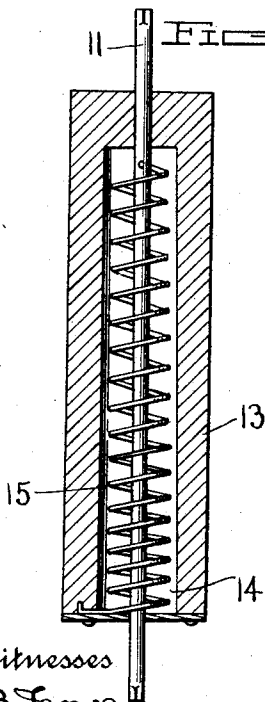
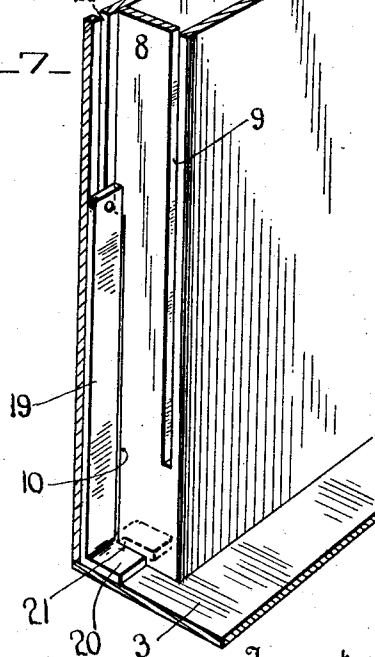
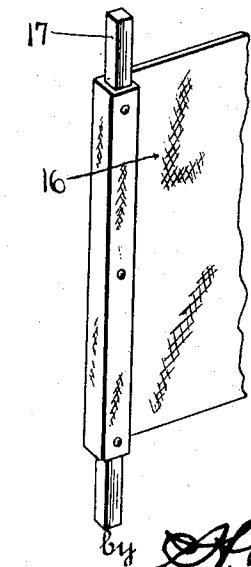


FIG. 3



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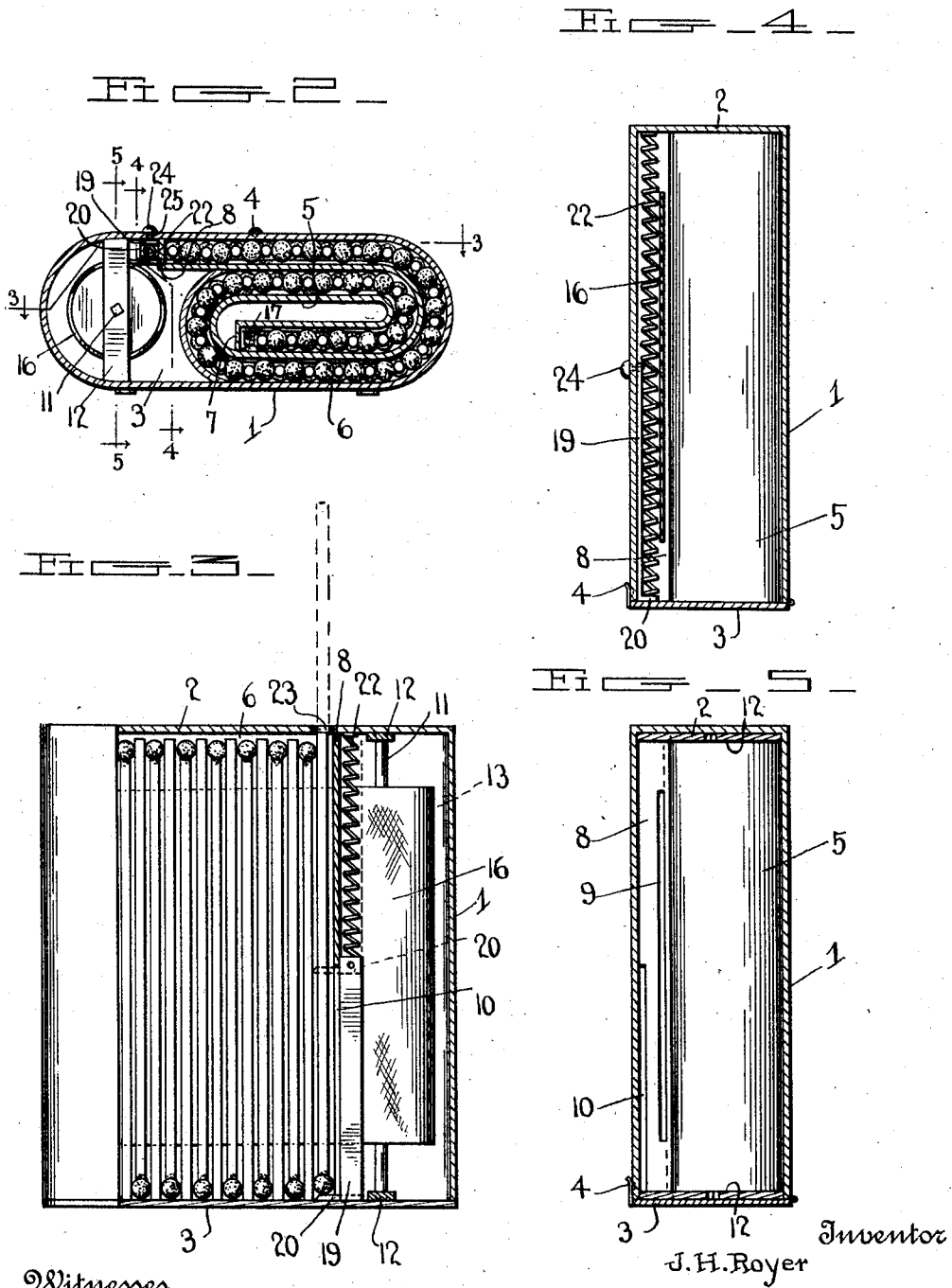
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2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

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POCKET MATCH-SAFE.

998,399.

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To all whom it may concern:

Be it known that I, JOHN H. ROYER, a citizen of the United States, residing at Dakota, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Pocket Match-Safes; and I do 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 appertains to make and use the same.

This invention relates to improvements in pocket match safes.

One object of the invention is to provide a pocket match box having an improved construction of match holding and delivering mechanism whereby one match at a time may be removed from the box and having means whereby when one match is removed another will be brought up in position to be ejected.

With this and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings: Figure 1 is a perspective view of my improved match safe showing a match partly ejected therefrom; Fig. 2 is a horizontal sectional view thereof on the line 2—2 of Fig. 1; Fig. 3 is a vertical sectional view on the line 3—3 of Fig. 2 showing in dotted lines the manner in which a match is ejected; Fig. 4 is a vertical sectional view on the line 4—4 of Fig. 2; Fig. 5 is a similar view on the line 5—5 of Fig. 2 with parts removed; Fig. 6 is a vertical sectional view of the web winding roller; Fig. 7 is a sectional perspective view of a portion of the box showing the construction and arrangement of the match ejecting mechanism; Fig. 8 is a detail perspective view of the inner end of the web and the follower secured thereto.

In the embodiment of the invention I provide a box or casing 1 which may be of any suitable shape but which is preferably of flat oblong form with rounded ends as shown. The box 1 is provided with a fixed top 2 and a hinged bottom 3 which is held in closed position by a spring catch 4. In one end of the box is arranged a vertically disposed spiral partition 5 which forms a spiral passage 6 in which is arranged the matches contained in the box. The inner

and outer ends of the passage are closed by the right angularly bent ends 7 and 8 of the partition as shown and in the angularly bent end 8 of the partition at the outer end of the passage is formed vertical slots 9 and 10, the purpose of which will be hereinafter described.

In the end of the box opposite to that containing the spiral partition 5 is arranged a roller shaft 11 the opposite ends of which are fixedly secured in cross strips 12 arranged in the top and bottom of the box. On the shaft 11 is revolvably mounted a spring web winding roller 13 in the lower end of which is formed a socket 14 having arranged therein a coiled spring 15 one end of which is secured to the shaft and the other end to the roller, as shown.

Secured at one end to the roller 13 and adapted to be wound on and off the same is a match shifting web 16, the outer end of which is passed through the slot 9 in the end 8 of the spiral partition 5. To the end of the web after being passed through the slot 9 is secured a follower block or strip 17.

The strip 17 and outer portion of the web is drawn around through the passage 6 to the stop plate at the inner end of the partition 5 and passage 6. In the passage between the follower strip 17 and the end plate 8 of the passage are arranged a sufficient number of matches to fill this space. The matches are preferably arranged with the head of every other match projecting up and the heads of the intermediate matches projecting down, as shown. When thus arranged the tension of the spring roller will be applied to the web 16 to rewind the same thus moving the matches toward the outer end of the passage 6. The web when thus wound on the spring roller will be drawn through the slot 9 in the end 8 while the matches will be stopped by said end and will be held thereby in position to be ejected one at a time from the box through a discharge passage 23 by means of an ejecting mechanism hereinafter described.

Slidably mounted in the end of the box adjacent to the plate 8 is a match ejecting member, comprising a vertically disposed plate 19 having on its lower end a foot 20 in which is formed a notch 21 whereby the parts of the same are engaged with the opposite sides of the plate 8 as shown.

The portion of the foot 20 which projects into the passage 6 and engages the inner

side of the plate 8 is adapted to receive one match at a time which is forced thereon by the pressure of the adjacent matches and follower strip 17. With the outer portion
 5 of the foot is engaged the lower end of a retracting spring 22, adapted to retract the ejecting mechanism after the same has been projected to eject a match through a match
 10 ejecting hole 23 in the top of the box as shown. The ejecting plate and foot are raised against the pressure of the spring 22, by means of a handle and knob 24 which projects through a slot 25 formed in the adjacent side of the box as shown.

15 It will be understood that in the operation of the safe the spring in the web winding roller will wind the web thereon thus drawing the follower strip and matches along through the spiral match passage toward the outer end of the same each time
 20 a match is removed in the manner described. After all of the matches have thus been removed the hinged bottom of the box is opened and the follower strip and web drawn back to the inner end of the passage
 25 and the latter again filled with matches. In thus drawing the follower strip and web back through the passage the web is unwound from the roller thereby revolving the
 30 latter in a reverse direction and rewinding the spring.

35 From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion

and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended claim.

Having thus described my invention what I claim is:—

45 A match safe comprising a casing having a partition therein arranged to form a match chamber closed at its opposite ends, one end wall of the chamber being secured at a right angle against the casing and having a longitudinal slot therein, the casing also being
 50 provided, adjacent the slotted end wall of the chamber, with a longitudinal slot, an L-shaped match ejector arranged in the casing adjacent the slotted end wall of the chamber and provided with a handle member
 55 extending through the slot in the casing, the foot or short arm of the L-shaped ejector extending inward from the casing and provided with a lateral extension within the match chamber having a transverse
 60 open slot straddling the slotted end wall of the chamber and guiding the match ejector in its longitudinal movement within and without the chamber, and means for propelling matches into position endwise over the
 65 extension of the ejector to be ejected thereby.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN H. ROYER.

Witnesses:

W. H. BUTTERFIELD,
 GEO. S. SMITH.