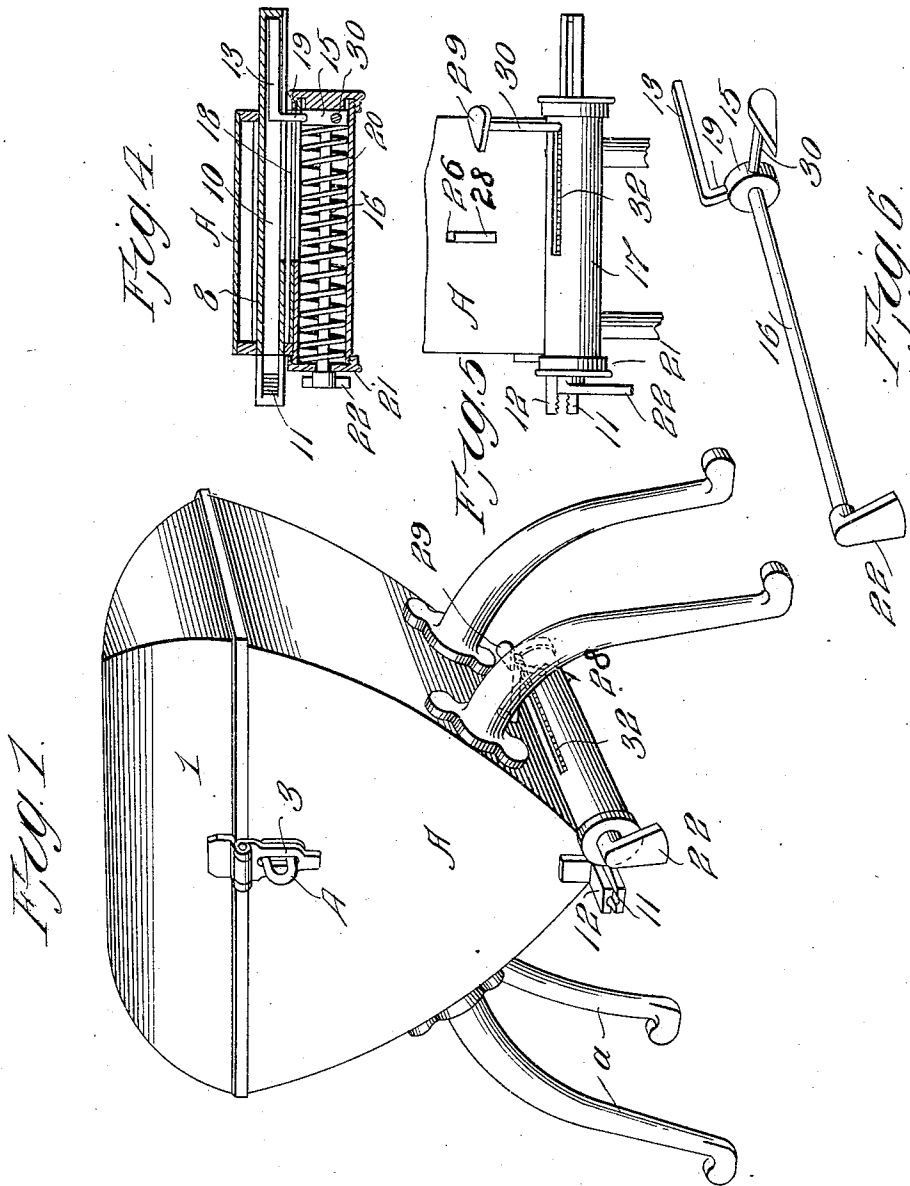


H. M. KING.
MATCH HOLDER OR SAFE.
APPLICATION FILED DEC. 4, 1908.

939,710.

Patented Nov. 9, 1909.
2 SHEETS—SHEET 1.



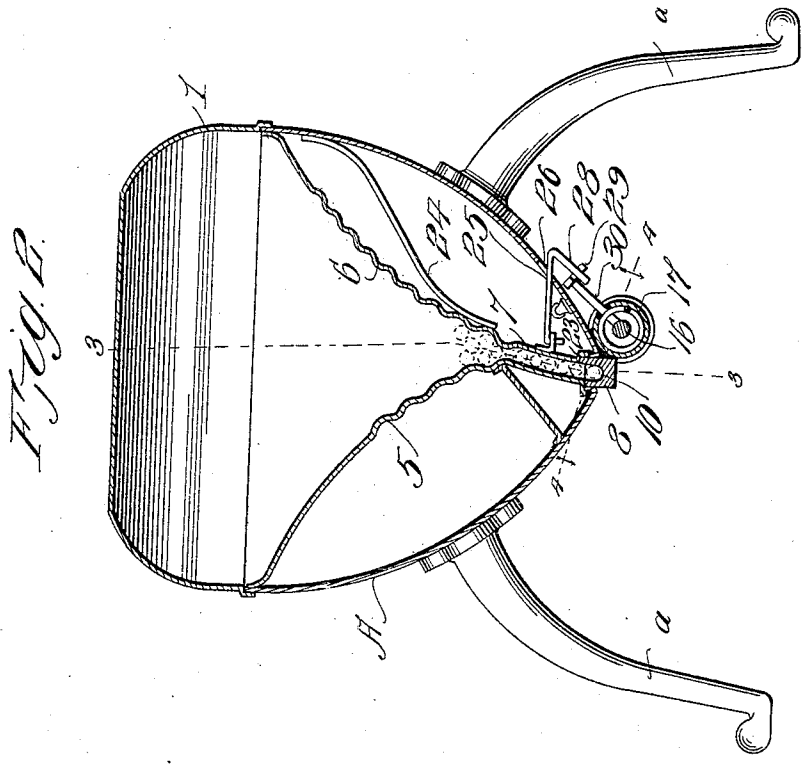
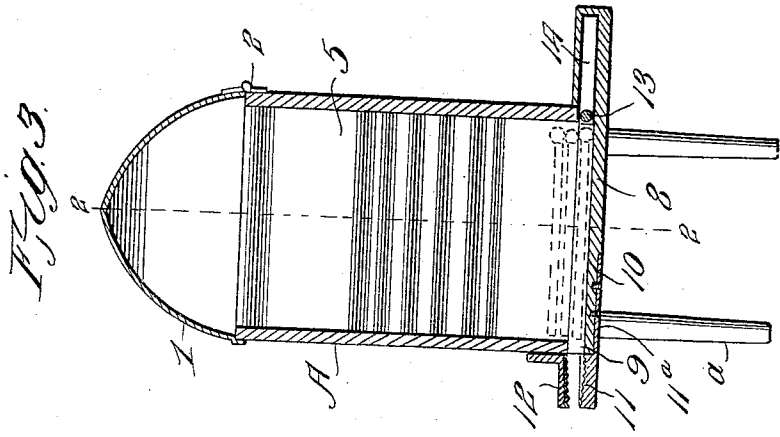
Witnesses
 Frank Hough
 C. Bradway.

Inventor
 Henry M. King,
 By Victor J. Evans
 Attorney

H. M. KING.
MATCH HOLDER OR SAFE.
APPLICATION FILED DEC. 4, 1908.

939,710.

Patented Nov. 9, 1909.
2 SHEETS—SHEET 2.



Witnesses
Frank Hough
C. Bradway.

Inventor
Henry M. King,
By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

HENRY M. KING, OF HATTIESBURG, MISSISSIPPI.

MATCH HOLDER OR SAFE.

939,710.

Specification of Letters Patent.

Patented Nov. 9, 1909.

Application filed December 4, 1908. Serial No. 466,012.

To all whom it may concern:

Be it known that I, HENRY M. KING, a citizen of the United States, residing at Hattiesburg, in the county of Forest and State of Mississippi, have invented new and useful Improvements in Match Holders or Safes, of which the following is a specification.

This invention relates to a match holder or safe of that type provided with an ejecting device so designed as to permit the matches to be taken out one at a time as required, and whereby each match is lighted as it is finally withdrawn from the safe.

The invention has for one of its objects to improve and simplify the construction and operation of apparatus of this character so as to be comparatively simple and inexpensive to manufacture, reliable and efficient in use, and readily manipulated.

Another object of the invention is the provision of a match safe provided with a hopper formed with a throat through which the matches drop by gravity into position in front of the ejector, and one wall of the throat being agitated simultaneously with the movement of the ejector so as to facilitate the feed of the matches in the throat of the hopper.

Another object of the invention is to provide an improved ejecting device which is efficient and reliable in operation, and easily and conveniently manipulated.

With these objects in view and others, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawings, which illustrate one embodiment of the invention, Figure 1 is a perspective view of the apparatus. Fig. 2 is a vertical section thereof on line 2—2, Fig. 3. Fig. 3 is a vertical section on line 3—3, Fig. 2. Fig. 4 is a detail section on line 4—4, Fig. 2. Fig. 5 is a fragmentary side view showing the ejecting mechanism. Fig. 6 is a perspective view of the ejector-actuating rod therefor.

Similar reference characters are employed to designate corresponding parts throughout the views.

Referring to the drawings, A designates the body of the match safe which is of any approved construction and material and clos-

ing the same at the top is a cover 1 which is mounted to swing on hinges 2 and which can be locked in closed position by a padlock for holding the hasp 3 of the cover in place on the loop 4. This body, which is supported on legs *a*, is formed into a hopper by oppositely-inclined plates 5 and 6 which have their lower ends so arranged as to provide a restricted passage or throat 7 just wide enough to permit the matches to feed through the same one at a time. At the bottom of the throat is a channel bar 8 on which the lowermost match rests when in ejecting position.

In the front wall of the casing A is an opening 9 in alinement with the channel 10 of the bar 8 through which the lowermost match is discharged and the front end of the bar is provided with a friction or striking jaw 11 which coöperates with a jaw 12 spaced above the same to cause the match to be lighted as it is withdrawn from the safe, the jaws being serrated or otherwise formed to insure the ignition of the match. The jaw 11 is provided with a flat leaf spring 11^a which permits the jaw 11 to yield when the head of a match passes between the jaws, thus preventing the head from being pulled off the stick or stem of the match.

Movable in the rear portion of the channel 10 is an ejector 13 which is normally accommodated in a chamber 14 formed in the rear end of the bar 8 which projects beyond the rear of the casing or body A, as shown in Fig. 3. This ejector is connected with a head 15 formed on the rear end of an actuating rod 16 which is mounted in a barrel or cylinder 17 mounted on the casing A adjacent the bottom thereof. As shown in Fig. 4, the barrel 17 and channeled bar 8 is formed with a horizontal slot 18 through which the connecting portion 19 between the ejector 13 and head 15 is adapted to slide back and forth. In the barrel or cylinder 17 is a helical compression spring 20 which bears at its rear end on the head 15 and at its front end on the removable head 21 of the cylinder, whereby the ejector is held in rearward position. The actuating rod 16 projects out of the front head 21 of the cylinder and is equipped with a finger piece or grip 22 whereby the user can pull the actuating rod forwardly to eject the lowermost match out of the casing by the ejector 13. This ejector does not, however, move the match completely out of the safe but ad-

vances it to such a position that the person using the device can grasp the match and pull it out manually, the head of the match being rearmost so that during the last part of the extracting movement, the head of the match will be ignited by the jaws 11 and 12. As soon as the finger piece 22 is released, the spring returns the ejector to initial position to thereby permit the next match to drop into the channel 10 in front of the ejector and to be thus in position for ejection when the actuating rod is again pulled forwardly.

In order to insure the regular feed of the matches through the throat 7, the plate 6 is agitated simultaneously with the operation of the ejecting device. For this purpose, the plate 6 is fixed at its upper end and is free to move back and forth from the plate 5. The lower end 23 of the plate 6 engages the channeled bar 8 which limits the movement of the plate 6 toward the plate 5 under the tension of the spring 24. Attached to the lower end of the plate is a rod 25 which extends outwardly through an opening 26 in one side of the body A and the outer extremity of this rod is bent into a depending arm 28 which is engaged by a wedge or cam 29 connected with the actuating rod 16, the wedge being secured to an arm 30 extending out of the cylinder 17 through a longitudinal slot 32 therein. As the actuating rod 16 is pulled forwardly for the ejection of the match, the wedge 29 will strike the arm 28 and pull the plate 6 to the left, Fig. 2, against the tension of the spring 24 to thereby permit the matches to feed freely down the throat 7. When the parts are restored to normal position upon the releasing of the grip 21, the wedge 29 moves away from the arm 28 so that the plate 6 will return to normal position by the spring 24.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what I claim is:—

1. A match safe comprising a casing containing a hopper having a movable wall and an opening for the discharge of the matches one at a time, a member having a channel in line with the discharge opening and adapted to receive the lowermost match, an ejector arranged to operate in said chan-

nel to effect delivery of the matches therefrom one at a time, an actuating rod exterior to the casing, connecting means between said actuating rod and ejector, a member connected with the movable wall of the hopper, and extending beyond the casing, and a cam connected with said actuating rod and movable therewith and adapted to coöperate with the said connecting member to effect positive movement of said movable wall.

2. In an apparatus of the class described, the combination of a casing, a hopper therein formed with a contracted throat through which the matches feed by gravity in a column, one wall of the throat being movable, a spring pressing on the wall to hold the same in normal position, an ejector for removing the lowermost match from the throat, a cam connected with the ejector, and a horizontally disposed member hingedly connected with the said movable wall and having a dependent portion arranged to be engaged by the cam for moving the wall laterally against the tension of the said spring.

3. A match safe comprising a casing containing a hopper having a movable wall, and provided with a channel to receive a single match and having a delivery opening in line with said channel, an actuating rod mounted exterior to the casing and adapted to receive a rectilinear movement, an ejector connected with said actuating rod and arranged to operate in the aforementioned channel to effect delivery of the matches therefrom one at a time, a rod connected with the movable wall of the hopper and extending beyond the casing, a cam connected with said actuating rod and adapted to engage with the projecting end of the rod connected with said movable wall for operating the same at each delivery of a match, and means for igniting the match in its final delivery.

4. A match safe comprising a casing having slots and openings in its sides, a channeled bar located at the bottom of the casing with the channel opening upward and adapted to receive the lowermost match, said channeled bar having its ends projecting beyond the ends of the casing, the one forming a guide chamber and the other a jaw, a second jaw arranged opposite the jaw formed by the projecting end of the channeled bar, a barrel secured to a side of the casing adjacent the channeled bar and having longitudinal slots in its sides, an actuating rod mounted for longitudinal movement within said barrel, a spring co-operating with said actuating rod, an ejector connected with the actuating rod and adapted to operate within the channeled bar, the connecting means between the ejecting and actuating rod operating in corre-

sponding longitudinal slots of the barrel and casing, means within the casing for agitating the matches to insure positive feed thereof, and having a portion extended 5 through an opening in a side of the casing, and a cam connected with said actuating rod and movable therewith and adapted to actuate said match agitating means, the connecting means between said cam and actuating rod, operating in a longitudinal slot 10 in a side of the barrel.

5. The combination of a casing, a hopper therein provided with a movable wall, an ejector arranged at the bottom of the casing 15 for delivering the lowermost match, an actuating rod mounted at the bottom of the cas-

ing, a spring pressing on the rod, a grip on the rod, a connection between the rod and ejector, a member connected with the said movable wall of the hopper and slid- 20 able back and forth through the wall of the casing; and a wedge exterior to the casing and connected with the rod and arranged to engage the said member for actuating the said wall. 25

In testimony whereof I affix my signature in presence of two witnesses.

HENRY M. KING.

Witnesses:

R. B. DRAUGHN,
C. E. TUCKER.