

No. 613,743.

Patented Nov. 8, 1898.

J. H. WATROUS.
SINGLE DELIVERY MATCH SAFE.

(Application filed Mar. 31, 1898.)

(No Model.)

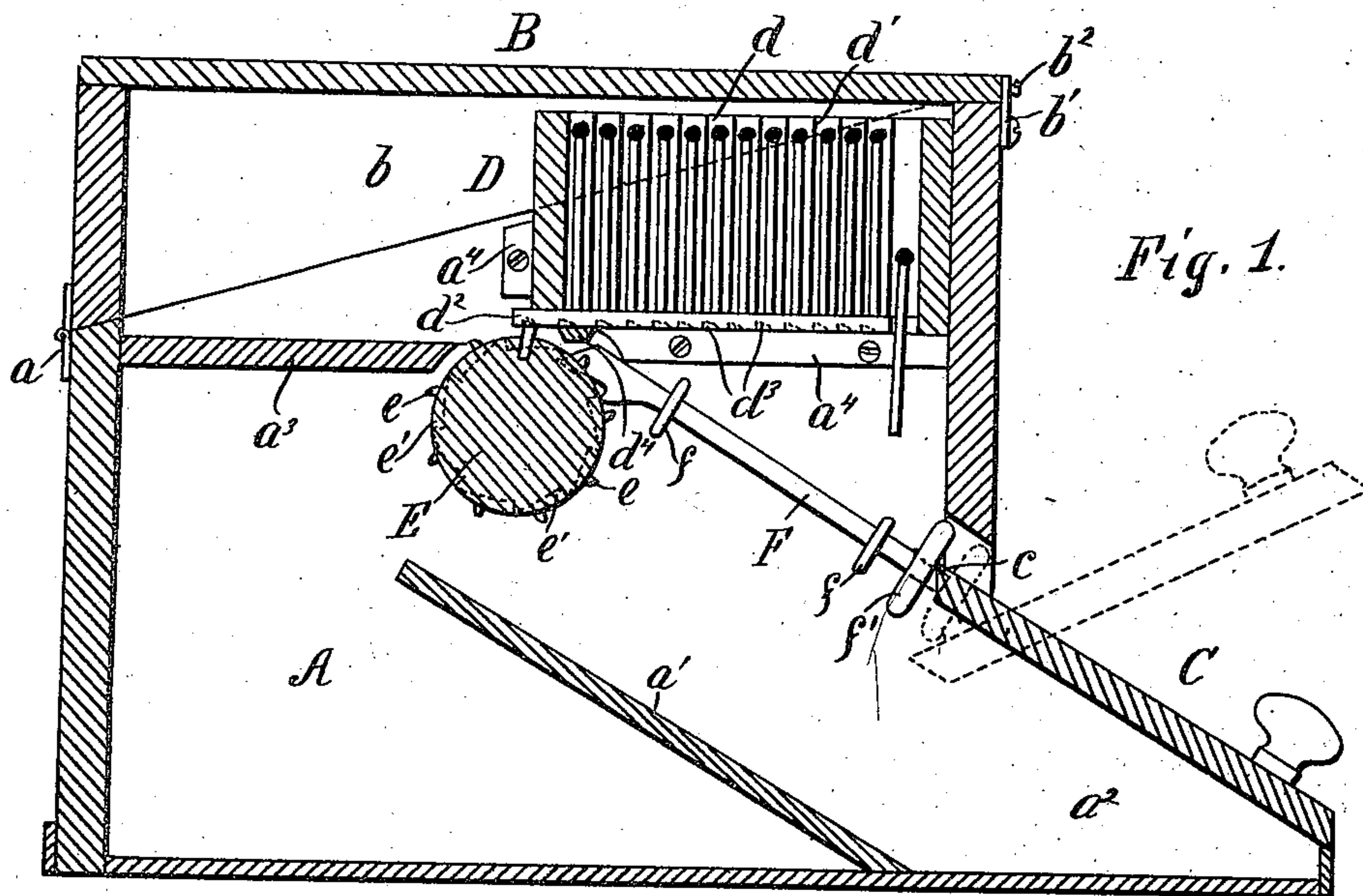
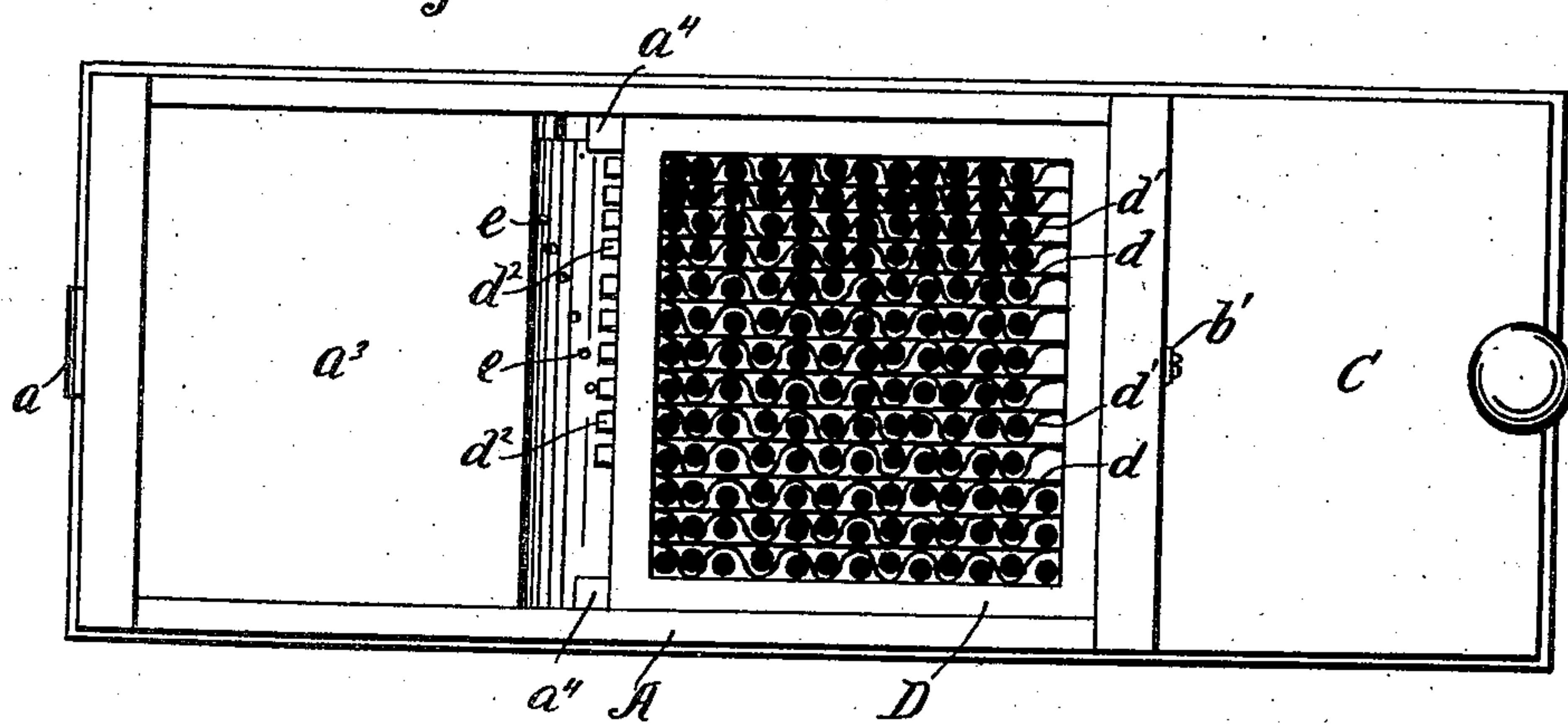


Fig. 2.



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SINGLE-DELIVERY MATCH-SAFE.

SPECIFICATION forming part of Letters Patent No. 613,743, dated November 8, 1898.

Application filed March 31, 1898. Serial No. 675,878. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. WATROUS, a citizen of the United States, and a resident of Ridgeway, county of Hardin, and State of Ohio, 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 an improvement in match-safes of the class adapted to deliver one match only at a time; and the object thereof is to provide a simple inexpensive device of this character adapted to automatically deliver the matches from a rack to the interior of the match-safe, from which they may be taken by reason of the lid of the compartment in which they are deposited.

The invention will be hereinafter fully described, and specifically set forth in the annexed claims.

In the accompanying drawings, Figure 1 is a central longitudinal sectional view of the device. Fig. 2 is a plan view, the cover being removed.

In the practice of my invention I employ a box A, made, preferably, of wood in the manner customary in constructing boxes. A lid B, having inclined sides b , is hinged to the rear wall of the box A at a in the usual manner, and a hook b' , pivoted to the front wall of the box A, is adapted for engagement with a projecting spur or button b^2 , fixed in the end of the lid. This hook is adapted to keep the cover closed.

Within the box A and extending across from side to side is fixed an inclined wall a' , which is adapted to deflect the matches falling from the rack above and throw them into the space a^2 , extended beyond the front wall of the box and immediately under the pivoted lid C. A shelf a^3 , fixed to the rear wall and extending across from side to side in the box, is adapted to form a table to receive the releasing-bars. Fixed to the side walls of the box are the brackets a^4 , which are adapted to support and retain in position the match-rack D, which is rectangular in shape, constructed of wood, and has neither bottom nor top.

Metallic partitions d divide the interior of

the match-box D into elongated compartments, and each of these compartments is further divided by means of the corrugated metallic walls d' into a series of compartments, each adapted to hold a single match. These walls may be fixed to the walls of the box D in any preferred manner or may be dispensed with entirely and the metallic or wooden block having holes for the matches substituted, if desired. The bottoms of these compartments are normally closed by means of the releasing-bars d^2 , which are adapted to slide longitudinally between the side walls of each line of compartments. These releasing-bars are provided on their under surface with a series of recesses d^3 , adapted for engagement with the projecting pins e of the cylinder E, which is mounted revolvably within the box A.

A guide-bar d^4 , extending across the box D, supports the releasing-bars d^2 .

The cylinder E has upon one end thereof a series of recesses e' cut, said recesses forming a ratchet adapted to be operated by the sliding rod F, which works longitudinally through the staples f and which is provided at its lower end with a cross-head f' . This cross-head is adapted for contact with the inner edge c of the lid C and is operated thereby.

In operation, the match-rack having been previously filled, one match being placed in each compartment, the lid B is closed and hooked and the machine is ready for operation. When the lid C is raised to the position shown by dotted lines in Fig. 1, the rod F slides downwardly and forwardly until the point engages the next ratchet-tooth below that shown in Fig. 1, and the head thereof occupies the position shown by dotted lines. The lid is then allowed to fall into closed position, thus pushing the rod F upwardly and rearwardly and revolving the cylinder E, carrying the projecting pins e , one of which engages one of the releasing-bars and moves it forward a sufficient distance to release one match, which falls to the inclined plate a' and rebounds to the bottom of the box at a^2 , when the lid C is again raised and the match may be taken out, and when the lid is allowed to fall again another match is released from the rack and dropped and takes the position of those previously withdrawn. The pins are

preferably arranged spirally upon the cylinder, so that all the releasing-bars are moved forward one peg, releasing the forward line of matches, as is best shown in Fig. 2, in which three of the releasing-bars have not yet been moved. When all in the forward row have fallen to the box below, one after the other, the operation is repeated and will be continued to be repeated automatically so long as any matches are left in the rack. When all have been expended, it is only necessary to raise the lid B and push the releasing-bars, which have fallen upon the table a^3 , back into position, and the rack may then be refilled with matches and the operation repeated.

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

1. An improved match-safe, embodying a match-rack, slidable releasing-bars having notches cut therein, a revoluble cylinder having pegs fixed in the periphery thereof, said pegs adapted for engagement with the notches of the releasing-bars, a box inclosing the same, and means for revolving said cylinder, substantially as shown and described.

2. An improved match-safe, embodying a box, a match-rack located within said box, said match-rack being divided into compartments, each adapted to hold one match, slid-

able releasing-bars adapted to normally close the bottom of said rack-compartments, a revolving cylinder having projecting pegs adapted for engagement with said releasing-bars, an inclined plane fixed within said box, a lid pivoted to said box, and means for revolving said cylinder, substantially as shown and described.

3. An improved match-safe, embodying a box, a match-rack within said box, said match-rack being normally closed by means of slidable releasing-bars, said releasing-bars being provided with a series of notches, a cylinder mounted within said box and having a series of pegs fixed spirally upon its periphery, said pegs being adapted to actuate said releasing-bars, said cylinder being provided with a series of recesses forming a ratchet, a sliding bar engaging said ratchet, a pivoted lid actuating said bar, an inclined plane within said box adapted to deposit matches in an extension of the box, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 28th day of March, 1898.

JOHN H. WATROUS.

Witnesses:

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