

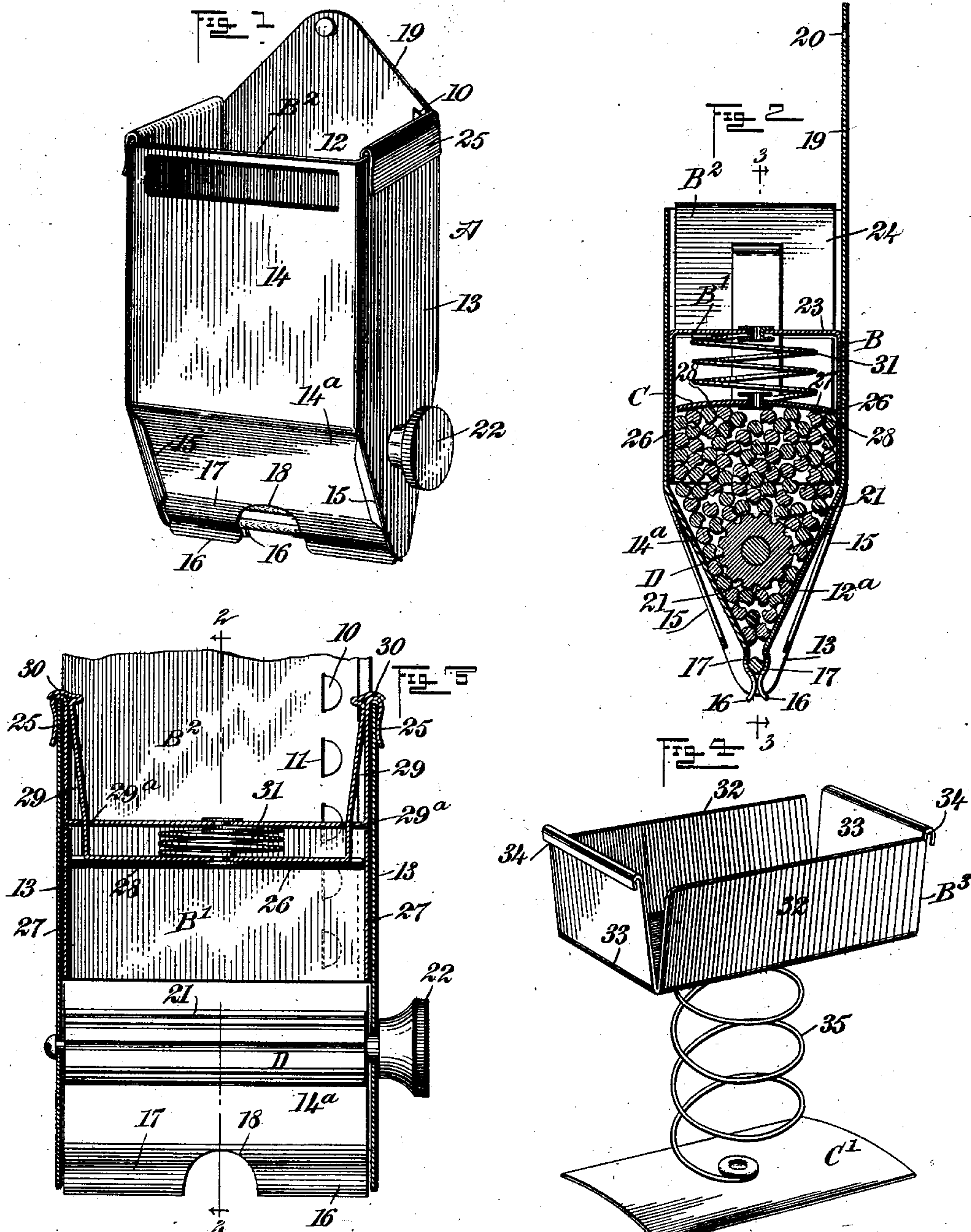
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F. KING.
MATCH SAFE.

APPLICATION FILED FEB. 21, 1903.

NO MODEL.



WITNESSES:

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MATCH-SAFE.

SPECIFICATION forming part of Letters Patent No. 744,357, dated November 17, 1903.

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To all whom it may concern:

Be it known that I, FERDINAND KING, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Match-Safe, of which the following is a full, clear, and exact description.

The purpose of my invention is to provide a match-safe or receptacle for matches so constructed that the matches can be removed therefrom singly only, one after the other, and to render such removal of the matches convenient and expeditious; also, to furnish exteriorly-operated means for insuring the matches being compactly and accurately fed to the outlet of the match safe or receptacle.

Another purpose of the invention is to so construct the match-safe that it can be readily hung up and can be provided with an upper chamber to receive burned matches and with a follower for forcing the matches in engagement with the feed device and initially around the same, which follower may be directly charged with matches, thus acting as a magazine for the major portion of the matches when the follower is placed in the match-safe.

Another purpose of the invention is to provide a compact, economic, and durable match-safe, and one which may be made to hold a quantity of matches, but which will waste none, as the matches must be withdrawn from the bottom of the safe one at a time, and the outlet is spring-controlled, closing after each match is drawn out.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improved match-safe. Fig. 2 is a vertical section taken from the front to the rear and practically on the line 2 2 of Fig. 3. Fig. 3 is a vertical section taken through the side portion of the safe substantially on the line

3 3 of Fig. 2, and Fig. 4 is a perspective view of another form of follower which may be employed if desired.

The body A of the match safe or receptacle is made of metal or of any suitable material; but usually it is made of metal and preferably in one piece, the metal being scored and bent upon itself to form a back 12, sides 13, and a front 14; but the lower portion of the body is made tapering both at the front and at the rear, and to that end the material of the body at the front and at the rear where it connects with the sides at the bottom portion of the body is cut, and the bottom, front, and rear faces of the body are bent inward in direction of each other, forming an inclined lower section 14^a, (shown in Figs. 1 and 2,) and the lower portions of the sides 13 are correspondingly tapered. The lips consequent upon such formation of the sides are bent over upon the said lower inclined faces 14^a, as is shown in Figs. 1 and 2. The outlet for the said body A is at the bottom, and as the body is preferably made of spring material the outlet is normally closed; but the lower edges of the body at the outlet are outwardly flared or curved, as is shown at 16 in Figs. 1, 2, and 3, so as to permit the ready outward passage of a match when the jaws formed by the contacting surfaces of the metal at the outlet for the body are forced open. Vertical openings 18 are made in the lower portion of the body at the front and rear, extending through the jaws or outlet portion of the body, and one opening is in registry with the other. The matches contained in the bottom of the body are exposed at their centers at these openings 18, as is shown in Fig. 1, and therefore the lowermost match may be readily gripped and drawn outward through the said spring-controlled outlet for the body, and just above the bottom outlet for the body on either side of said openings an interiorly-formed recess 17 is produced, extending from side to side parallel with the said outlet. This recess 17 is of sufficient size to receive a single match only, as is best shown in Fig. 2.

The back 12 of the body A is preferably carried upward a sufficient distance to form an extension 19, having a suitable opening

20 therein, whereby the match-safe may be suspended from a nail, peg, or other support, as is shown in Fig. 1.

At a suitable distance above the outlet at the bottom of the body A and within the inclined lower section of the said body a feed-roller D is mounted to turn, the trunnions whereof are journaled in the sides 13 of the body, and this feed-roller D is provided with longitudinal grooves 21, so that when the roller is turned the roller will have a grip upon the matches in the body which surround the roller and the roller will tend to direct the matches to the outlet end or bottom of the body. This roller is readily turned by means of a knob 22, secured to or constituting an integral portion of one its trunnions, as is shown in Figs. 1 and 3.

In the upper portion of the body A a waste-receptacle B is located, together with an attached follower C. This waste-receptacle is usually made of sheet metal, and consists of a bottom 23, upwardly-extending end members 24, provided with outwardly-formed hooks 25 at their upper ends to receive the upper edges of the sides 13 of the body, front and rear downwardly-extending members 26, and one or two end members 27. This waste-receptacle is preferably made of one piece of material, and the end members 27 are attached to one lower side only, so that they will spring outward and engage with the sides of the body A in order to prevent the follower C when acting on the matches from forcing the waste-receptacle out of position. Thus it will be observed that when the waste-receptacle is placed in the body A an upper chamber B² is formed, in which the burned matches may be placed, and when the body of the match-safe is to be charged with matches they are first laid in the lower portion of the same until, for example, they practically cover and surround the feed-roller D. Enough matches are then placed in the lower chamber B', formed in the waste-receptacle by the construction of its lower portion, to fill it, the said receptacle being then upturned, and the said receptacle is restored to its normal position and is made to enter the body A, thereby constituting a magazine-chamber for the matches in the upper part of the body. It is necessary that these matches at the upper portion of the body shall be constantly fed downward to the feed-roller D as the lowermost match is withdrawn from the safe. To that end a follower C is employed, which consists, preferably, of a concaved sheet of metal of suitable thickness, having bearing upon the upper row of matches, and a spring 31, which connects the said plate with the bottom or dividing member 23 of the waste-receptacle, as is shown in Figs. 2 and 3, together with arms 29, which extend upward from the ends of the follower-plate 28 through openings 29^a in the member 23 of the said

waste-receptacle, and when the matches are to be placed in the magazine-chamber B' of the waste-receptacle the follower is pushed outward until hooks 30 at the ends of the said arms 29 can be swung over the hooks 25, which are at the upper extremities of the upper end members 24 of the waste-receptacle, as is shown in Fig. 3. The follower being in this position, the magazine-chamber B' is filled with matches, and the said waste-receptacle, with its attached follower, is placed in position in the body A, occupying the position shown in Fig. 3. After the said waste-receptacle B is in the body the arms 29 are disengaged from the upper portion of the waste-receptacle, thus permitting the spring 31 to force the follower-plate 28 downward upon the mass of matches in the body, as is shown in Fig. 2.

Under this construction it will be observed that a match-safe can be made capable of holding any desired quantity of matches and that it is impossible to withdraw more than one match at a time from the safe, as but one match is fed to the recesses 17, and that is the only match which can be gripped by the thumb and fingers to draw it out through the outlet of the body.

In Fig. 4 I have illustrated a slight modification in the construction of the waste receptacle and follower, in which the waste-receptacle is designated as B³ and the follower as C'. Under this latter construction the waste-receptacle is made from one piece of metal, comprising a bottom, opposing upwardly-extending sides 32, and opposing upwardly-extending ends 33, the sides and ends being separated from one another, and at the upper edge of each end member 33 an outwardly-formed hook 34 is produced, whereby the said receptacle B³ can be secured at the upper edge of the body A in the same manner as the waste-receptacle B, (shown in the other views,) and the follower C' also consists, preferably, of a curved plate, the said plate being connected with the bottom of the waste-receptacle B³ by a suitable spring 35.

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

1. A match-safe, comprising a body provided with front and back pieces of spring material bent together and thence turned outwardly at the lower edges thereof, to form a spring-controlled outlet for the matches, said pieces being correspondingly notched at said lower edges to permit withdrawal of a match by the fingers, and also being bent outwardly to form oppositely-located recesses on either side of the notches above the outlet, said recesses between them being adapted to receive but a single match at a time, and a removable receptacle within the body having attached thereto a spring-actuated follower for forcing contained matches toward the outlet.

2. A match-safe, comprising a body provided with front and back pieces of spring material bent together and thence turned outwardly at the lower edges thereof, to form a
 5 spring-controlled outlet for the matches, said pieces being correspondingly notched at said lower edges to permit withdrawal of a match by the fingers, and also being bent outwardly to form oppositely-located recesses on either
 10 side of the notches above the outlet, said recesses between them being adapted to receive but a single match at a time, and a removable receptacle within the body having attached thereto a spring-actuated follower for forcing
 15 contained matches toward the outlet, said receptacle having means retaining the same in place in opposition to the action of said follower.

3. In a match-safe, a body having a tapering lower portion, a spring-controlled outlet at the bottom of the said tapering portion of the safe, which lower tapering portion of the safe has also a finger-receiving opening at the outlet, a feed-roller mounted to turn in the
 25 said safe above the outlet, a waste-receptacle having means for detachable engagement with the upper portion of the safe, being adapted to enter the same, and a spring-controlled follower carried by the said waste-receptacle and adapted to force the matches in
 30 the safe in direction of the said feed-roller and the outlet of the safe, said receptacle having means retaining the same in place against the action of said follower, as set forth.

35 4. In a match-safe, a body having its lower portion of tapering form and front and rear lower sections inclining in direction of each other and provided with a spring-controlled outlet at the lower end of the said tapering
 40 portion, together with a horizontal interior recess capable of holding a single match, lo-

cated just above the said outlet, an opening crossing the said recessed portion and extending through the lower edge of the said body, exposing a match located in the recessed portion of the body, a feed device within the
 45 body, and a waste-receptacle and spring-controlled follower also located within the body above the feed-receptacle, both being removable therefrom, said receptacle having means
 50 retaining the same in place against the action of said follower, as described.

5. In a match-safe, a body having its lower portion of tapering form, and front and rear lower sections inclining in direction of each other and provided with a spring-controlled
 55 outlet at the lower end of the said tapering portion, together with a horizontal interior recess capable of holding a single match, located just above the said outlet, an opening
 60 crossing the said recessed portion and extending through the lower edge of the said body, exposing a match located in the recessed portion of the body, a feed device within the body, a waste-receptacle also located within
 65 the body, having means for detachable attachment with the upper edge of the body, the said waste-receptacle having a magazine-chamber for matches formed at its bottom portion, and a spring-controlled follower at-
 70 tached to the said waste-receptacle and located within the said magazine-chamber, said receptacle having means retaining the same in place against the action of the follower, for the purposes set forth.
 75

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FERDINAND KING.

Witnesses:

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 JNO. M. RITTER.