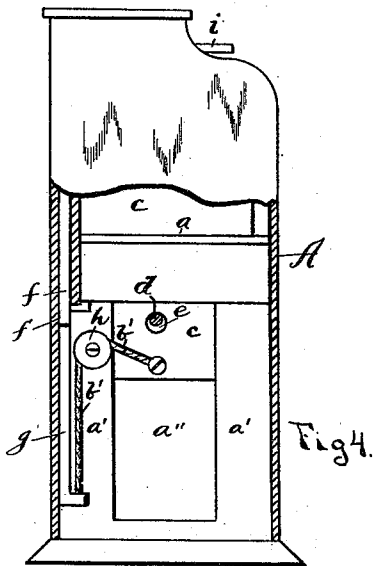
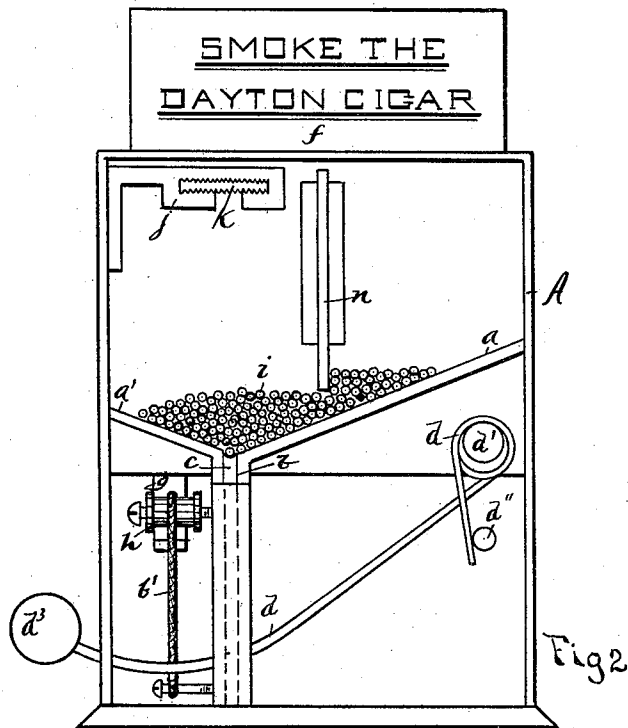
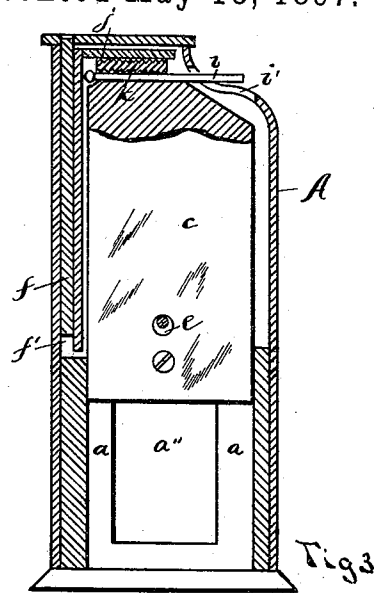
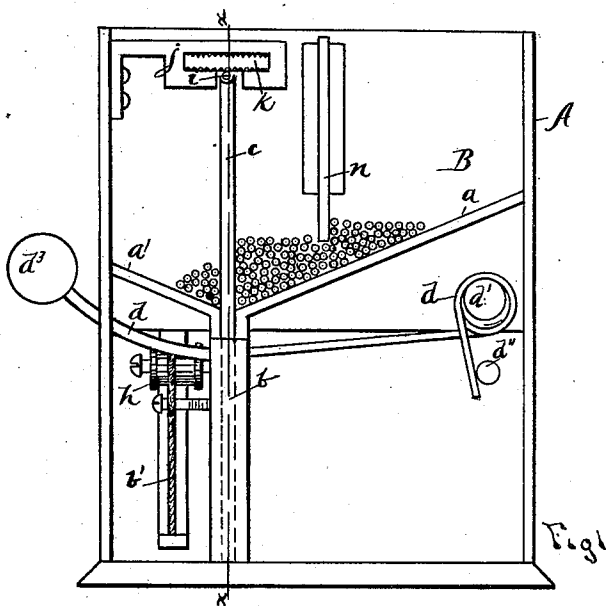


(No Model.)

S. E. BALL.
MATCH SAFE.

No. 582,992.

Patented May 18, 1897.



Witnesses
J. Longenecker.
L. Parrott.

Inventor
S. E. Ball.
By R. J. McCarty,
his Attorney.

UNITED STATES PATENT OFFICE.

SAMUEL E. BALL, OF DAYTON, OHIO.

MATCH-SAFE.

SPECIFICATION forming part of Letters Patent No. 582,992, dated May 18, 1897.

Application filed March 13, 1896. Serial No. 583,043. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL E. BALL, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in match-safes, and has for its object the further perfection of the match-safe shown and described in United States Letters Patent No. 553,502, granted to myself and E. E. Bower January 28, 1896.

The features embodying said invention are as hereinafter specified, and relate specifically to slides simultaneously actuated vertically to deliver a match and display an advertisement and other devices cooperating therewith.

Referring to the annexed drawings, Figure 1 is a front elevation with side of casing removed and the mechanism in its normal position; Fig. 2, a similar view showing the mechanism in different positions; Fig. 3, a sectional view, line *x x* of Fig. 1; Fig. 4, a side elevation, partly in section, with casing broken away.

The letter A designates the inclosing case, that may be of any ornamental design.

B is the hopper in which the matches are placed and the floors *a a'* of which extend downwardly in a vertical line and provide a slot *b*, in which a match-elevator *c* slides. The vertical parts of said parts *a* and *a'* are slotted, as at *a''*, so as to enable access to the elevator *c* for the purpose of attaching a cable, cord, or similar device *b'*, which will be again referred to.

d designates a coil-spring supported on a stud *d'*, that projects from the inner rear side of the case. *d''* is a lug, also projecting from said side of the case and against which one end of said spring rests. The other end of said spring passes through an opening *e* in the elevator *c* and has upon its end a finger-

piece *d³*. The tension of the spring is such that the match-elevator is normally maintained in a raised position.

f designates a slide that moves vertically in a slot *f'* in a side of the casing and upon which an advertisement may be placed.

g is a bar projecting downwardly from said slide, to the lower end of which the cable *b'* is attached. This cable, as hereinbefore stated, is attached to the lower end of the match-elevator and passes over a spool *h*, mounted on a side of the casing.

The match-elevator *c* and the slide *f* occupy positions at right angles to each other.

It will be understood from the drawings that the movements imparted to said match-elevator and slide *f* by the movement of the finger-piece *d³* will be simultaneous and in opposite directions. For example, a downward movement of the finger-piece from the normal position shown in Fig. 1 will lower the match-elevator *c* and elevate the slide *f*, as shown in Fig. 2. When the elevator reaches its lower position, the upper horizontal edge thereof is just below the inner horizontal edges of the floor of the hopper, so that a match *i* rolls thereon each time that said elevator is lowered.

As is shown in the drawings, the upper edge of the match-elevator is concaved throughout its length to provide a suitable support for each match.

j designates a support which is secured to a side of the case. This support has a slot in which is placed a piece of rough or corrugated material *k*, against which the matches *i* are brought when the elevator *c* is raised.

As shown in Figs. 3 and 4, the casing at its upper end curves inwardly and has a slot *i'*, through which the end of each match projects when elevated, so that the fingers may catch hold thereof. In withdrawing said matches they are ignited by the roughened surface of the piece *k*.

n designates a guard projecting through the matches from the rear of the casing, the object of which is to prevent the matches from crowding in the vicinity of the vertical slot in which the match-elevator moves.

Having fully described my invention, I claim—

In a match-safe, the combination with an

inclosing case having a hopper therein provided with a vertical slot extending downwardly therefrom, of a slide *f* inclosed in a slot in the rear of said case, a match-elevator
5 *c* inclosed in the slot extending from the hopper, and occupying a position at a right angle to the slide *f*, a spring *d* having its inner end coiled, and its straight portion projected through an opening in the elevator *c*, and
10 through an opening in the case to form a handle for operating the elevator *c*, and a flexible connection between the lower end of the ele-

vator *c* and the slide *f*, whereby the said elevator and slide are simultaneously movable in opposite directions, upon each movement 15 of the spring *d*, substantially as and for the purposes specified.

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

SAMUEL E. BALL.

Witnesses:

R. J. McCARTY,
I. LONGENECKER.