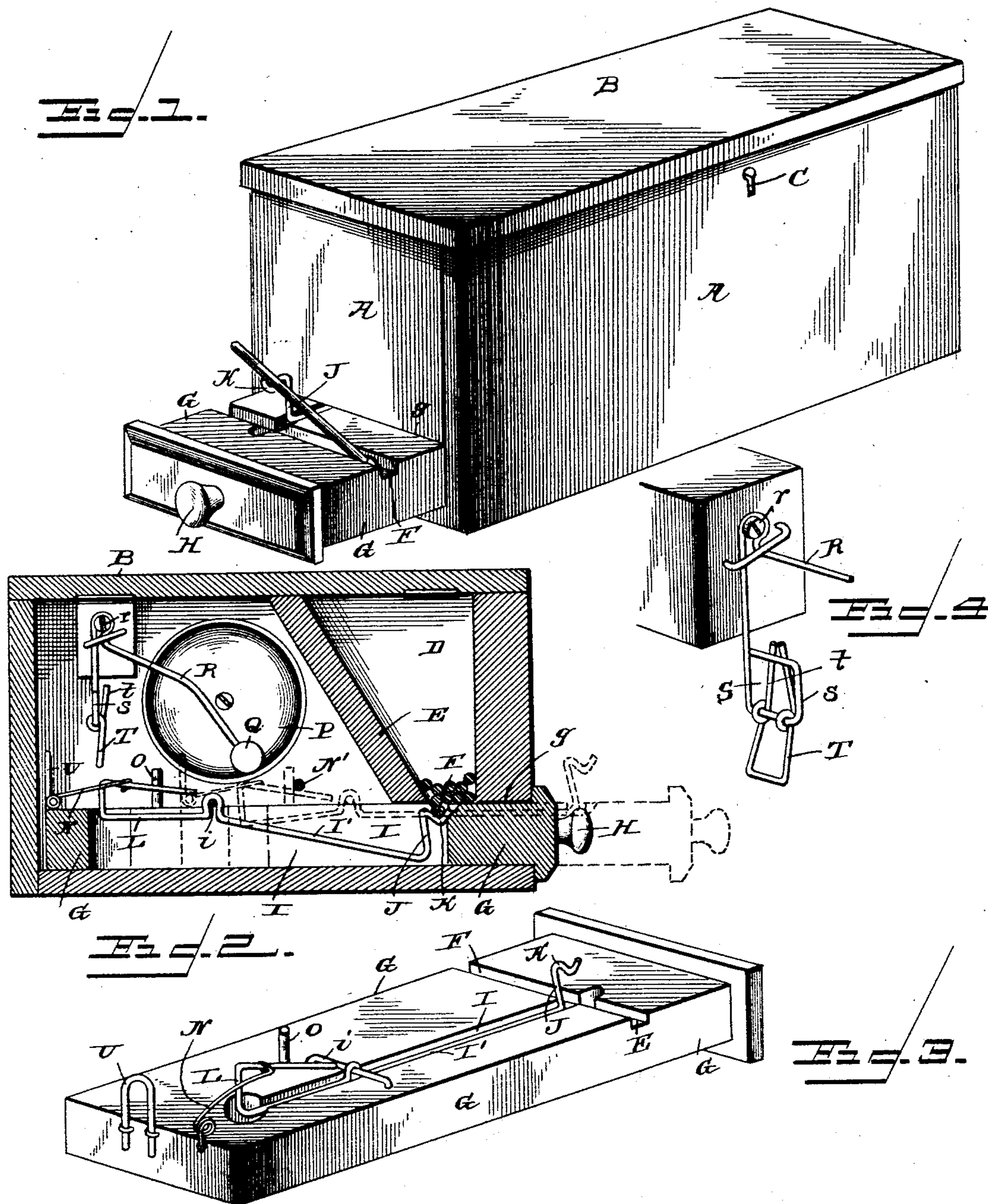


(No Model.)

T. KISSINGER.
ALARM MATCH SAFE.

No. 520,063.

Patented May 22, 1894.



Inventor
Thomas Kissinger

Witnesses
E. H. Stewart
David P. Thompson

By *his* Attorneys.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

THOMAS KISSINGER, OF LITITZ, PENNSYLVANIA, ASSIGNOR OF ONE-HALF
TO JULIUS F. STURGIS, OF SAME PLACE.

ALARM MATCH-SAFE.

SPECIFICATION forming part of Letters Patent No. 520,063, dated May 22, 1894.

Application filed June 14, 1893. Serial No. 477,563. (No model.)

To all whom it may concern:

Be it known that I, THOMAS KISSINGER, a citizen of the United States, residing at Lititz, in the county of Lancaster and State of Pennsylvania, have invented a new and useful Alarm Match-Safe, of which the following is a specification.

This invention relates to alarm match safes; and it has for its object to provide an improved device of this character whereby a person can only obtain one match at a time, and cannot get at the matches without giving an alarm.

To this end the main and primary object of the present invention is to provide an improved match safe, having an alarm whereby notice will be given immediately to parents when their children are playing with the matches or trying to secure one, or will serve as an indication to any one that the matches are being meddled with.

The device also contemplates for delivering and ejecting one match at a time, so that, in cigar or other stores, persons will only take one match as needed and not several as is customary, thereby providing a device having economy as one of its objects.

With these and other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a match safe constructed in accordance with this invention, showing the slide drawer extended and a match ejected from the match pocket in the drawer. Fig. 2 is a central vertical longitudinal sectional view of the safe taken at one side of the match ejecting or lifting device. Fig. 3 is a detail in perspective of the slide drawer. Fig. 4 is a similar view of the alarm hammer and its lever arm.

Referring to the accompanying drawings, A represents a rectangular inclosing box having a hinged top lid B, which may be suitably locked by a lock C, so as to close the box to all persons excepting the one having the key, while at the same time providing means for gaining ready access to the interior of said

box, to fill the same with matches, or to inspect the working parts thereof. The said box A, has at one end thereof the match hopper B, in which is designed to be placed a sufficient quantity of matches, and such hopper is formed between one end of the box and the inclined feed board E, which serves to direct or guide the matches one at a time into the transverse match pocket F, formed in the slide drawer G, near the outer end thereof. The slide drawer G, is designed to work freely in the end opening g, formed in one end of the box A, and is of a length equaling that of the box, so that when the drawer is slid entirely within the box, the transverse match pocket therein opens into the match hopper, and is disposed at the lower edge of the feed board E, so as to readily receive a match, which always falls into the said pocket even though there be but one match in the hopper. The slide drawer has a knob H, attached to the outer flanged end thereof, to permit of the drawer being readily withdrawn out of the box to bring the match outside and convenient to be taken. The slide drawer G, is further provided with the longitudinally disposed slot I, which intersects the transverse match pocket at its front extremity and extends to a point near the extreme inner end of the slide drawer, so as to accommodate the pivoted match lifting or ejecting rod I'. The match lifting or ejecting rod I', is pivoted, at a point near its inner end, on the transverse pivot rod i, and is provided with a right angled outer end J, having a hooked extremity K, which, when the drawer is slid within the box, is designed to be normally held in the slot I, directly below the bottom of the transverse match pocket, so that when raised, the said hooked terminal will take under the match in said pocket and lift the same out of the pocket into a convenient position for a person to take, as very clearly shown in Fig. 1 of the drawings.

The inner extremity of the lifting or ejecting rod I, is provided with an inclined loop portion L, which is constantly engaged by one end of the upwardly pressing spring N, the tension of which is sufficient to normally hold the hooked lifting end of the rod within the slot I, and below the match pocket, when

the drawer is within the box, but when the drawer is drawn out, the said inclined loop portion L, rides under the transverse stationary slide bar N', arranged in the box. As the drawer is slid out of the box and carries a match in the pocket thereof, the inclined loop L, rides under the transverse slide bar H, as just stated, and which operation causes the inner end of the rod I', to be depressed and thereby elevate the other outer end, which lifts or ejects the match from the match pocket as shown in the drawings. The outward movement of the drawer is limited by the stop pin O, which comes in contact with said slide bar.

Secured within the box A, is the alarm bell P, which is adapted to be struck by the hammer Q, fastened on one end of the bell crank strike lever R. The bell crank strike lever R, is pivoted at r, to a suitable point of attachment and terminates at the extremity of one of its arms in a loop S, to which is pivoted the trip arm T. The trip arm T, is provided with a stop extension t, which is adapted to be thrown against the upper portion of the loop of the strike lever, when engaged by the contact arm or wire U, secured to the inner end of the slide drawer. Now it will be seen that as the drawer is pulled out of the box, the contact arm or wire engages the lower end of the trip arm T, which carries up the hammer, and when the contact arm of wire leaves the trip arm, the hammer falls and strikes the alarm. When the drawer is slid back within the box, the contact arm or wire rides under the arm T, which trips to this movement of the drawer on account of its pivotal connection.

From the foregoing it is thought that the construction, operation and many advantages of the herein described match safe will be apparent without further description.

It is to be understood that 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 this invention.

Having thus described the invention, what is claimed and desired to be secured by Letters Patent, is—

1. In a match safe, the closed box having a match hopper at one end, a slide drawer moving horizontally within the box and having a transverse match pocket near one end, and a longitudinal slot intersecting the match pocket at one extremity, and an automatic lifting or ejecting rod working in said longitudinal slot and having an angled hook end adapted to work below and through said match pocket, said hook-end being adapted to engage under the match in said pocket substantially as set forth.

2. In a match safe, a closed box having a hopper at one end, a stationary transverse slide bar arranged within the box, a slide drawer moving horizontally within the box and having a transverse match pocket near one end and a longitudinally disposed slot intersecting said match pocket, a lifting or ejecting rod pivoted to the slide drawer and working in said slot, said rod having at one end a right angled hook lifting or ejecting portion adapted to engage under the match in said pocket and at its opposite end an inclined loop L, adapted to slide under the transverse slide bar, and elevate the hook-end and upwardly pressing spring attached to the loop end of said rod, and an automatic alarm device arranged within said box substantially as set forth.

3. In a match safe, the combination with the hopper, and the slide drawer moving under said hopper and having a contact arm or wire at its extreme inner end, of a suitably arranged alarm bell, a bell crank strike lever pivoted adjacent to the alarm bell and carrying at one end a hammer, and having at its other end a stop loop, and a trip arm pivoted to the said loop and having a stop extension at one side of its pivot, said trip arm being adapted to be engaged by said contact arm or wire, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THOMAS KISSINGER.

Witnesses:

LIZZIE SHOWERS,

WILLIAM A. STURGIS.