

E. B. NICHOLS.
MATCH BOX.
APPLICATION FILED JULY 2, 1907.

898,914.

Patented Sept. 15, 1908.

Fig. 1.

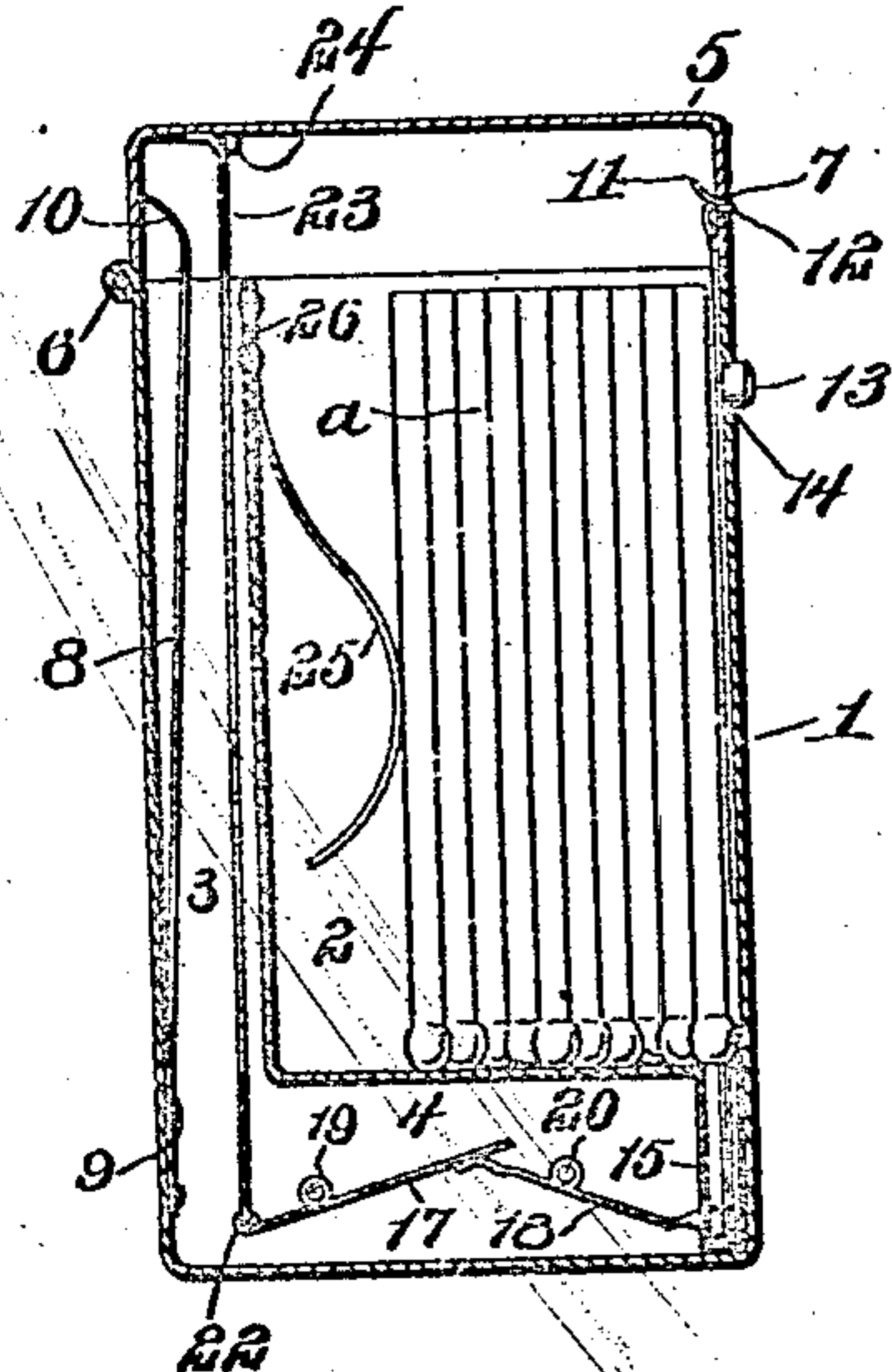


Fig. 2.

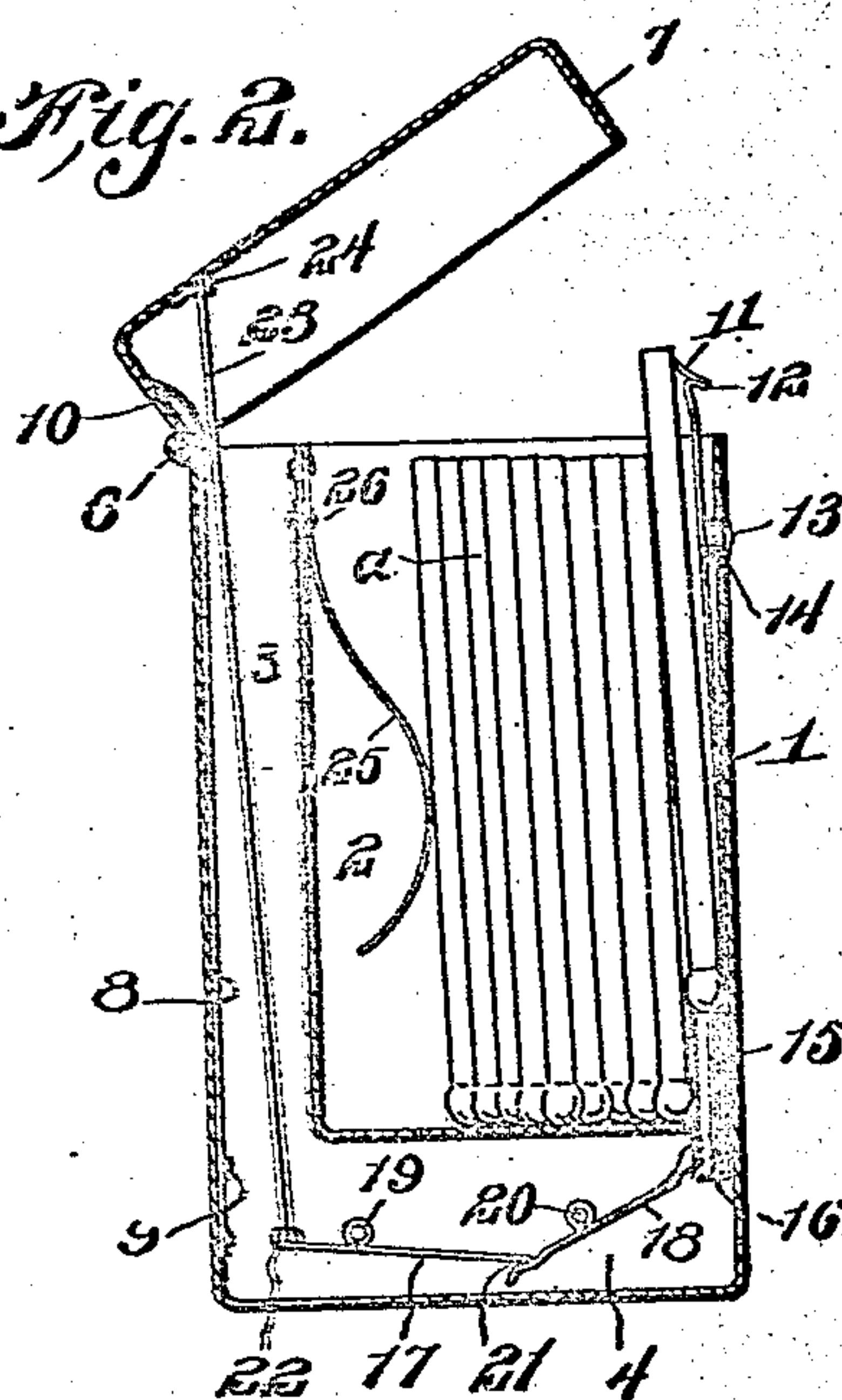
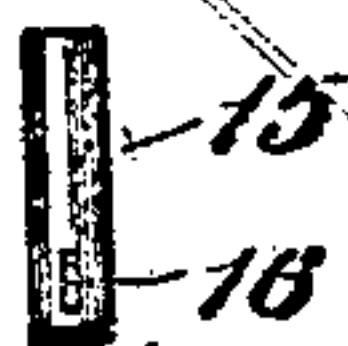


Fig. 3.



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EDGAR BYRON NICHOLS, OF MOUNT AIRY, NORTH CAROLINA.

MATCH-BOX.

No. 898,914.

Specification of Letters Patent.

Patented Sept. 15, 1908.

Application filed July 2, 1907. Serial No. 381,827.

To all whom it may concern:

Be it known that I, EDGAR BYRON NICHOLS, a citizen of the United States, residing at Mount Airy, in the county of Surry and State of North Carolina, have invented new and useful Improvements in Match-Boxes, of which the following is a specification.

This invention is an improved match ejecting match box, adapted, when its cover is open, to automatically partially eject a match so that the latter may be readily grasped and withdrawn from the match box and which, as the match is thus withdrawn from the match box, will serve to ignite such match, and the said invention consists in the construction, combination and arrangement of devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a sectional view of the match box embodying my invention, showing the same closed. Fig. 2 is a similar view, showing the same open. Fig. 3 is a detail elevation of the plunger which serves to automatically eject the matches.

A match box 1, which may be of any suitable size, shape and construction and may also be made of any suitable material, is provided with an inner compartment 2 for the reception of the matches, a chamber 3 being formed between contiguous side walls of the box and the compartment and a chamber 4 which communicates with the lower end of such chamber 3, being formed between the bottoms of the box and the compartment.

A cover 5 is hinged to one side of the box, as at 6, is of sufficient size, covers the upper ends of the compartment 2 and of the chamber 3. The said cover is provided in its free side with an opening 7. A spring 8 which is disposed in the chamber 3 has its lower end secured, as at 9, to one side of the box. The free, upper end of the said spring is out-turned and bears against the hinge side of the cover 5, as at 10, so that the said spring, when the cover is released by the means hereinafter described, serves to open such cover.

On the inner side of the common wall of the box 1 and match compartment 2 is secured the lower edge of a spring catch 11 which is provided near its upper, free end with a hook or lip 12 to pass through the opening 7 and secure the cover in closed position. A push button 13 projects outwardly from the said spring catch and extends

through an opening 14 in the common wall of the match box and match compartment, as shown. It will be understood, that by pressing such push button, the spring catch will be disengaged from the cover and the latter will be opened by the spring 8.

In that end of the bottom of the match compartment 2 which is nearest the common wall of the box and such compartment is an opening in which operates a cylindrical match ejecting plunger 15. The same is provided near its lower end with a transverse opening 16. A pair of levers 17—18 are pivotally mounted, as at 19—20, in the chamber 4 below the bottom of the compartment 2. The inner ends of such levers are in sliding contact, as at 21. That is to say, the inner end of the lever 17 bears and is slidable on the inner end of the lever 18. Hence said levers form a compound lever. The outer end of the lever 18 extends through and is freely movable in the opening 16 of the plunger. The outer end of the lever 17 is connected pivotally, as at 22, to the lower end of a rod 23, which rod extends upwardly through the chamber 3 and has its upper end pivotally connected to the cover as at 24. Hence, when the cover is opened by the action of the spring 8, as hereinbefore stated, said rod 23 is drawn longitudinally in one direction by the said cover and causes the lever 17 to operate upon the lever 18 as to cause the latter to move the plunger upwardly in the bottom and at the outer side of the match compartment.

The matches, indicated at *a* are placed in the compartment 2 head down so as to bear against the bottom of such compartment. A spring 25 in the said compartment and the upper end of which is attached, as at 26, to the upper portion of the inner wall of such compartment, bears outwardly against the matches so as to force them toward the outer side of the match compartment and cause one of them, when the cover is closed and the plunger is lowered, to bear on the upper end of such plunger. Hence, when the cover is open and the compound lever and plunger are operated by the movement of the cover, the plunger, as it moves upwardly, will force the outermost one of the matches upwardly so that its stem will be projected above the open upper end of the match box, to enable the same to be readily grasped. The oppo-

site side walls of the match compartment are, in practice, roughened to provide friction surfaces which serve, as a match is withdrawn from the said compartment to rub
5 against the head and ignite such match.

In addition to the compartment 2, the match box may be provided with another compartment to hold matches, which may from time to time be taken therefrom and
10 placed in the compartment 2, as the latter becomes empty.

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

15 1. A match box having an inner compartment spaced from one side and the bottom thereof, and also having a hinged cover, a plunger at one side and the bottom of the inner compartment, means to move the
20 matches in such direction as to cause one of them to register with the plunger, a rod in the space at one side of the inner compartment and connected to the cover, and a lever in the space between the bottoms of the box and inner
25 compartment, said lever connected to the said rod and the said plunger and causing the

plunger to be automatically operated to eject a match when the cover is opened.

2. A match box having an inner compartment spaced from one side and also from the
30 bottom thereof, said box further having a hinged cover, a plunger at one side and the bottom of the inner compartment, means to move the matches in such direction as to cause one of them to register with the plunger,
35 a rod in the space at one side of the inner compartment and connected to the cover, and a compound lever in the space between the bottoms of the box and inner compartment, one of the members of the compound
40 lever being connected to the rod, the other member being connected to the plunger, and said members being slidably connected together, substantially as and for the purpose
45 described.

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

EDGAR BYRON NICHOLS.

Witnesses:

S. A. HAUSER,
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