

P. D. M. Carmichael.

Match-Safe.

N^o 72973

Patented Jan. 7, 1868

Fig. 1.

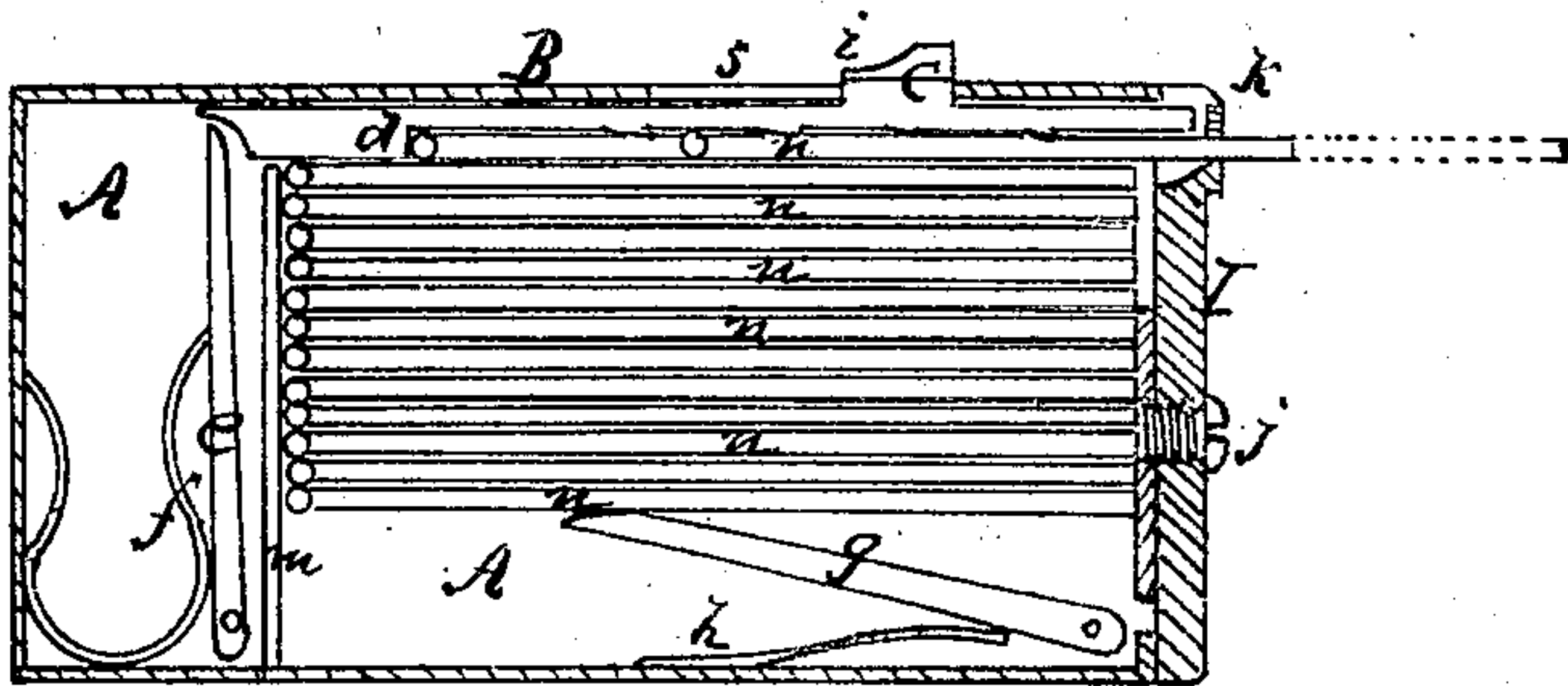


Fig. 3.

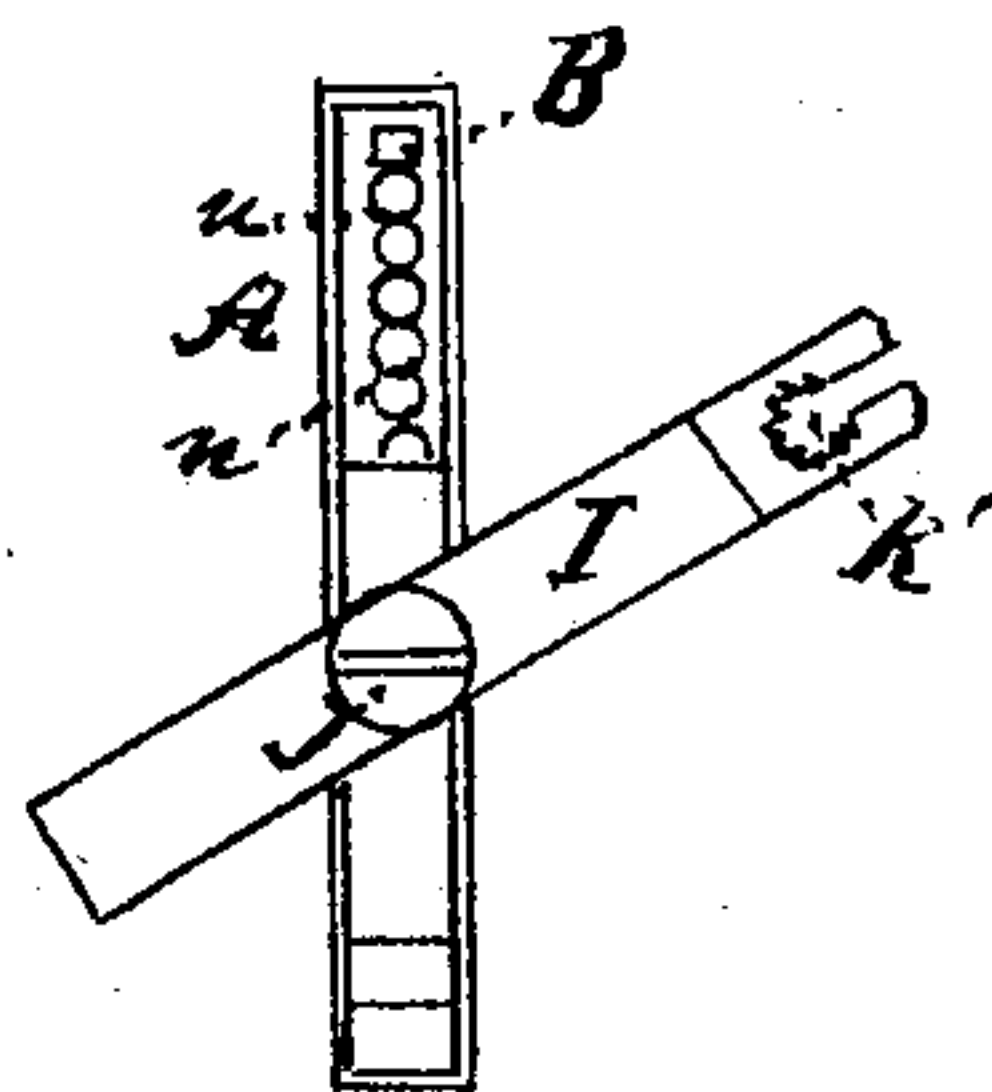
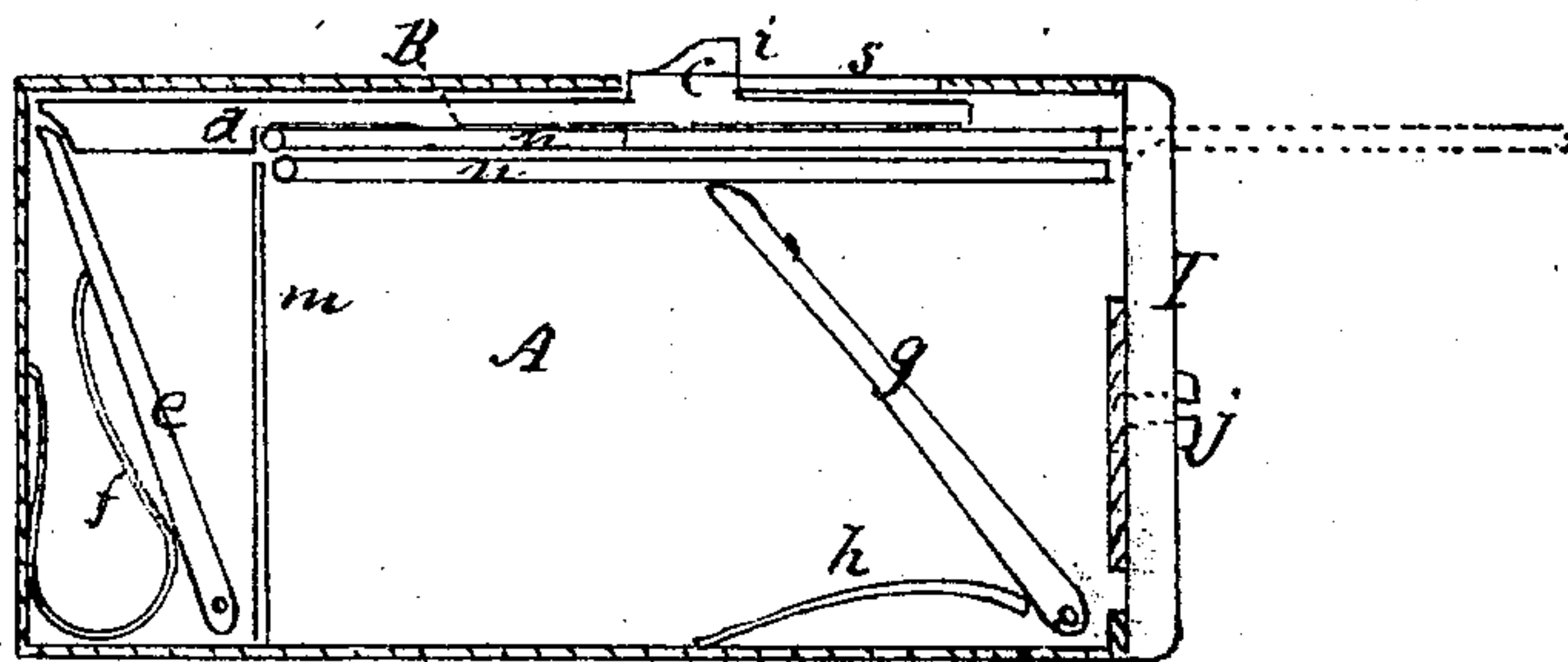


Fig. 2.



Inventor.

Peter D. M. Carmichael.
by J. Fraser & Co.
Atty.

Witnesses.

Theodore S. Hunt
Jay Hyatt.

United States Patent Office.

PETER D. M. CARMICHAEL, OF LE ROY, NEW YORK.

Letters Patent No. 72,973, dated January 7, 1868.

IMPROVED MATCH-SAFE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, PETER D. M. CARMICHAEL, of Le Roy, in the county of Genesee, and State of New York, have invented a certain new and improved Match-Safe for the pocket, which I denominate the Meteoric Match-Safe; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan of my improved safe, with one side of the case removed, with a match represented in the act of being discharged and ignited.

Figure 2 is a similar view, with the driving-spring *f* compressed ready for delivering a match.

Figure 3 is a view of the end of the safe, with the pivoted cap removed from the case.

Like letters designate corresponding parts in all the figures.

My improvement belongs to that class of match-safes designed more especially for carrying in the pocket, the match, when required, being forced partially out of the case, and ignited as the phosphorus end is drawn out.

The invention consists in the arrangements by which the matches are discharged, ignited, and fed up to the propelling-arm.

In the drawings, A represents the case, the sides of which are only a trifle further apart than the diameter of an ordinary friction-match, and which is preferably made of about the size shown. B is the propelling-arm, arranged at one edge, with a lug or trigger, *e*, extending outward through a slot, *s*, in the case, in which it plays back and forth as the arm is operated, which is retained in place by cheeks *i i*, on each side of the trigger, that overlap the edge of the case on the outside. The arm B is operated by a lever, *e*, pivoted at one end, and actuated by a spring, *f*, which is compressed by pulling the arm back by means of its trigger *e*, as represented in fig. 2. The side of the arm contiguous to the matches is provided with a shoulder, *d*, and ratchets *o o*, for a purpose presently to be explained. The matches are kept in contact with the arm B and fed up thereto by means of the dog *g*, pivoted at one end to the corner of the case, while the other is pressed against the side of the matches by a spring, *h*, as represented. I is a cap-piece, pivoted at or near the centre of the front end of the case, so as to close the end of the safe, except when supplying it with matches. It is then swung around, as shown in fig. 3, when the matches are readily inserted. The cap I is retained in place by the end of the arm B, which locks it by extending in the slot *k* in its end, fig. 1. This slot is enlarged, as represented at *k'*, to allow sufficient space for the passage of the match, and roughened or armed with teeth, so as to ignite the match by friction as its prepared end is drawn through. The inner edge of the opening *k'* is enlarged, so as to present inclined sides for guiding the match therein, as most clearly shown in fig. 1. *m* is a foot-partition, against which the matches rest.

The operation of my improvement is obvious. The safe being filled, and the parts in the normal position shown in fig. 1, a match is driven out by pulling back the propelling-arm B, by its knob *e*, which brings the shoulder *d* a trifle back of the end of the first match, which is pressed by the dog *g* against the discharging-arm, as shown, fig. 2, and in position for being driven out. By letting go the knob *e*, the recoil of the spring *f* throws the arm back to its first position, the shoulder *d* driving the match through the door in the cap I, as represented in red lines in both figures, which ignites as the phosphorus is brought in contact with the teeth in the mouth *k*. The spring *h* and arm *g* carry forward the matches to fill the place of the one withdrawn, successively, until the safe becomes empty, when it may be replenished by partially swinging round the cap-piece I, as before described. The short matches or pieces, that the shoulder *d* cannot drive out, are readily discharged by small teeth or spurs *o o*, arranged along the side of arm B.

My improvement forms a compact and convenient safe for carrying in the pocket. By two simple movements a match can be discharged and ignited ready for use. The inclined sides of the mouth *k'* insure the discharge of the match, which might not always occur were they differently constructed. The same action of the spring and lever *f e*, that discharges the match, also brings the parts to their normal position again, the single movement of pulling back the trigger C being all that is required in operating the safe.

What I claim as my invention, and desire to secure by Letters Patent, is—

The propelling-arm B, constructed substantially as described, in combination with the actuating-lever *e*, spring *f*, and mouth *k*, arranged and operating substantially as and for the purpose set forth.

I also claim, in combination therewith, the dog *g* and spring *h*, arranged and operating substantially in the manner and for the purpose specified.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

PETER D. M. CARMICHAEL.

Witnesses:

CHARLES DANFORTH,
CALVIN KNOWLES.