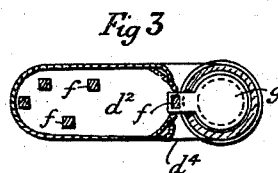
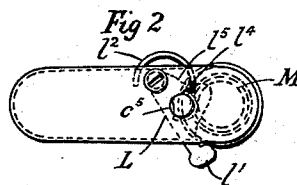
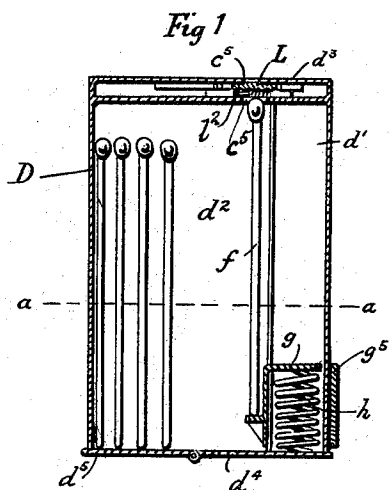


(No Model.)

D. J. MORGAN.
COMBINED MATCH BOX AND LIGHTER.

No. 509,481.

Patented Nov. 28, 1893.



Witnesses

Edwin H. Hardy
James E. H. Blackburn.

Inventor

D. J. Morgan
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UNITED STATES PATENT OFFICE.

DAVID JOHN MORGAN, OF CARDIFF, ENGLAND.

COMBINED MATCH BOX AND LIGHTER.

SPECIFICATION forming part of Letters Patent No. 509,481, dated November 28, 1893.

Application filed December 28, 1892. Serial No. 456,604. (No model.) Patented in England February 27, 1892, No. 3,861.

To all whom it may concern:

Be it known that I, DAVID JOHN MORGAN, a subject of the Queen of Great Britain, and a resident of Walmer House, Canton, Cardiff, in the county of Glamorgan, Wales, England, have invented certain new and useful Improvements in a Combined Match-Box and Automatic Match-Lighter, (for which I have obtained a patent in Great Britain, No. 3,861, dated February 27, 1892,) of which the following is a full, clear, and exact specification.

This invention relates to receptacles for containing matches or vestas; its object being to arrange with the same, means for ejecting or protruding one match at a time therefrom, and simultaneously lighting each said match automatically; to attain which I employ a receptacle and combined apparatus substantially as arranged in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a sectional elevation, Fig. 2 a plan, and Fig. 3 a sectional plan taken on line *a a* of Fig. 1, of my invention.

Similar letters of reference denote corresponding parts in each view.

The box or receptacle *D*, is made with a barrel part *d'*, and a case part *d''*, which are joined together at top and bottom, by the covers *d'''*, and *d''''*, the latter being arranged with a lid *d'''''*. In the barrel part *d'* is fitted a spiral spring *h*, which presses against the under side of a plunger or feeder *g*, which latter is so arranged that a ferrule or flange part *g''* extends on the outside of the barrel part *d'*, in order to be easily operated upon by the fingers, for the purpose hereinafter described.

At the upper end of box *D* is pivoted a scratcher or striker *L*, which when in closed position covers up a hole *c''*, made in cover of box for the match to protrude, or be forced through. The striker or scratcher *L*, has a knob or head *l'*, and a cut-away part *l''*. I arrange a spring retainer or holder *l'''* pivoted at *l''''* and which works under the striker *L*, and is kept so as to partly cover up the hole *c''* by

a spring *M* excepting when otherwise forced away by the pressure of the finger upon the part of *l'''* extending on the outside of case. The matches *f*, are placed in the case *d''*, with their striking heads toward the cover *d'''*, and by turning the box sidewise, and pulling down the feeder *g*, a match will roll to position shown at Fig. 1, the head bearing against the under part of the holder *l'''*; then by pressing the protruding part of the holder *l'''*, the head of match is forced up to the roughened under side of the striker *L*. Then by pulling the striker *L* over sharply from left to right, it lights the match *f*, and immediately the feeder *g*, carries the lighted match upward extending it from the box, and the holder *l'''* retains it in position. It will be obvious that when the match is in position shown at Fig. 1, the striker *L* can be moved from right to left, and then by pressing *l'''*, the match can be pressed from box without being lighted, or when it may be wished to eject a match lighted, it is only necessary to press the holder *l'''* simultaneously with the moving of the striker *L* from left to right.

I am aware that match boxes or safes have been arranged to contain matches to be forced out one by one, and lighted but hitherto no mechanism has existed whereby, by the simple movement of the striker the match is lighted, and immediately extended from the box.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

A striker *L* capable of lateral movement, in combination with a spring holder *l'''*, and a feeder *g*, substantially as described and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of July, 1892.

DAVID JOHN MORGAN.

Witnesses:

JOHN J. WILLETTS,
WALTER E. HOWARD.