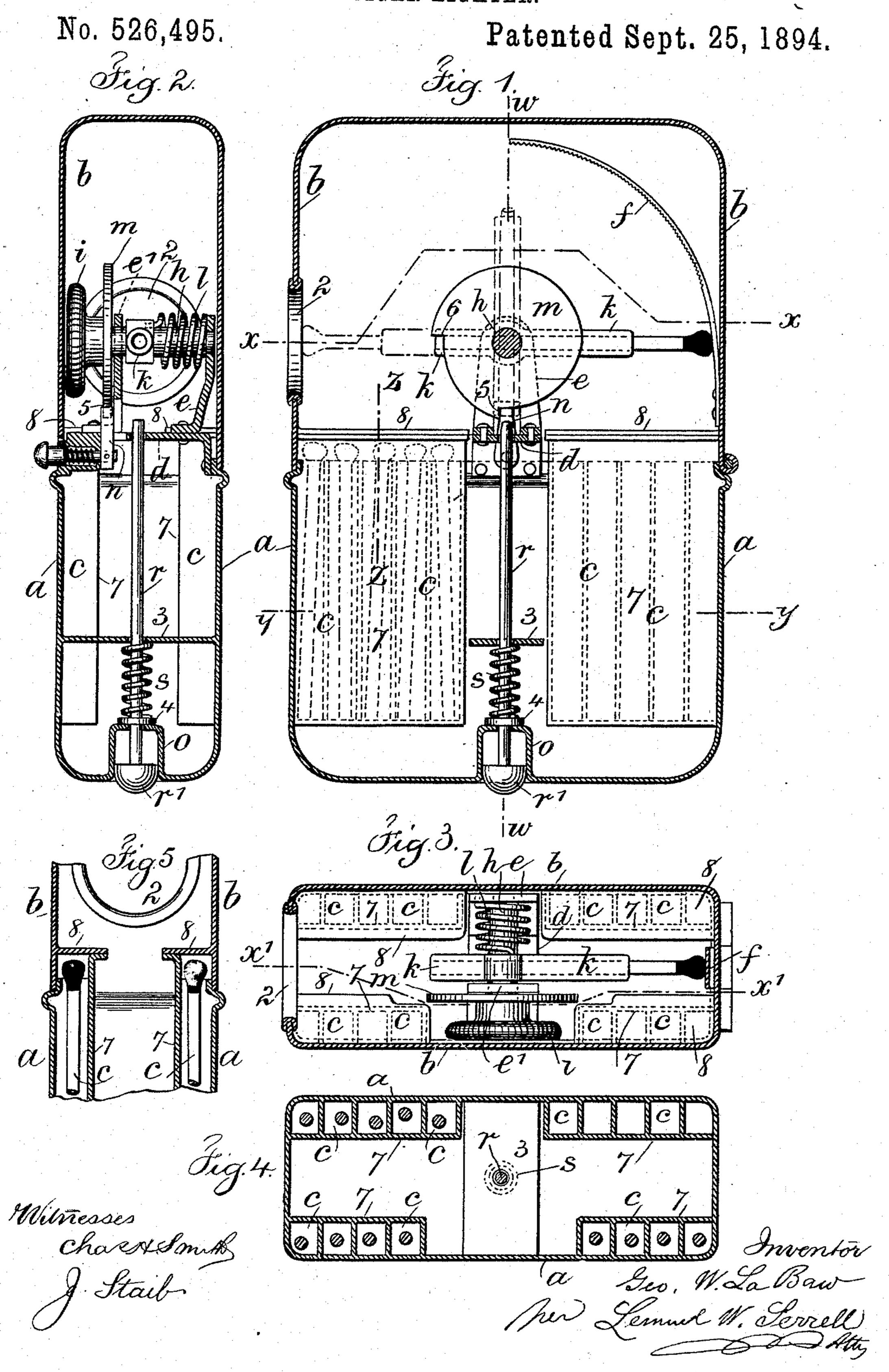
G. W. LA BAW.
CIGAR LIGHTER.



## United States Patent Office.

GEORGE W. LA BAW, OF BAYONNE, NEW JERSEY.

## CIGAR-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 526,495, dated September 25, 1894.

Application filed October 30, 1893. Serial No. 489, 434. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. LA BAW, a citizen of the United States, residing at Bayonnecity, in the county of Hudson and State of New Jersey, have invented an Improvement in Cigar-Lighters, of which the following is a specification.

Difficulty is frequently experienced in lighting cigars and cigarettes from the ignited match being blown out by the action of currents of wind, because unprotected, and the object of my invention is to overcome this difficulty and to provide in a cigar lighter a device adapted to both hold and ignite matches, the flame being retained within the case through an opening in which the cigar or cigarette can be inserted and lighted by the flame of the match, without the risk of the flame being blown out.

case which contains receptacles for matches and supports for a rotary match carrier. A cover is hinged to this case and provided with an igniter and an opening for inserting the end of the cigar or cigarette to be lighted by the burning match. The rotary match carrier is adapted to be held with its match in position to be ignited and to be released by a catch and actuated by a spring and the match ignited while the cover remains closed, and means are provided should the end of the match become broken, for pushing out the broken stem so that a whole match may be inserted.

In the drawings, Figure 1 is a vertical longitudinal section illustrating my improvements. Fig. 2 is a vertical cross section at the line w, w, of Fig. 1. Fig. 3 is a sectional plan at the line x, x. Fig. 4 is a sectional plan at the line y, y, and Fig. 5 is a partial vertical cross section at the line z, z. The section Fig. 1 is taken at the line x' x' of Fig. 3.

The figures of the drawings are shown of exaggerated size for clearness; *i.e.* about four times the measurement.

The cigar lighter is composed of the case a which forms the lower portion, and the hinged cover b which forms the upper portion. The

case a is provided with receptacles c for matches and these are arranged as shown 50 along the opposite sides of the case extending down into the case below the meeting edges of the case and cover, the igniting heads on one end of the matches standing above the upper edge of the case where they can be 55 grasped readily by the fingers and removed from the receptacles.

The case a, is provided with a cross plate d at its upper edge, and rising from said crossplate are supports  $e\,e'$ . The supports  $e\,e'$  60 form bearings for the shaft h of the match carrier. The hinged cover b is provided with an igniter f which consists of a curved plate with a friction surface, which friction surface may consist of the metal roughened or of a 65 piece of sand paper or emery paper attached thereto.

The hinged cover b has an opening at 2 for inserting the end of a cigar or cigarette to be lighted. The shaft h is provided at one end 70 with the knurled wheel i adapted to be grasped by the thumb and fore-finger in rotating the shaft. A tube k extends through the shaft and acts as a receptacle to frictionally hold a match to be ignited; or in other 75 words, the tube k is provided with hubs at each side which form a shaft.

A spring l surrounds the shaft h between the support e and the tube k, one end of the spring being secured in the support e and the 80 other end of the spring being secured adjacent to the tube k in the enlarged portion thereof which forms a hub, and upon the shaft h is a notched disk m which comes adjacent to the knurled wheeli; and I provide a spring 85 actuated catch n operating in the upper part of the case a to engage this notched disk mso as to hold the match carrier in either a horizontal or vertical position, the horizontal position representing that in which the match 90 is ready to be ignited and the vertical position that in which a fresh match is inserted or the broken stem removed from the match carrier.

In the bottom of the case a I provide a socket o and across the case a plate 3, and a 95 push rod r extends vertically through the

base of the socket and through the plate 3, and said rod is provided with a finger head r' in said socket and with a disk 4, and a spring s surrounds said push rod between the disk 4 5 and the plate 3, and the upper end of this push rod extends through and slightly above the cross plate d at the top of the case a and said rod is in the same plane as the tube k holding the match.

In the position shown in Fig. 1 by full lines, the match carrier and match occupy the position wherein the parts are set, and the spring actuated catch n engages the notch 5 of the disk m, holding the match at right 15 angles with its end resting against the igniter f, and in this position the spring l is under strain.

When the catch n is pushed in by the finger from the outside and the disk m is released, 20 the spring lacts to fly the match carrier a half rotation overinto the position shown by dotted lines. In this movement the igniting end of the match is carried over the face of the igniter and is lighted, and coming over into the dotted 25 position, the same burns adjacent to the opening 2 in the cover through which the end of a cigar or cigarette is inserted and brought in contact with the flame without the risk of the flame being blown out. The parts are re-30 turned into the aforesaid position by the thumb and finger grasping the knurled wheel i, and imparting a partial rotation to the shaft h after the insertion of each fresh match so as to repeat the igniting operation.

If the stem of the match either in the act of igniting or in any other way should become broken off adjacent to the end of the tube kso that it becomes necessary to remove the broken stem and replace the same with a whole 40 match, the tube k is placed vertically, the catch n engaging the notch 6 of the disk m. In this position the tube k and the push rod r are in line and the finger is pressed against the head r', pushing the rod r vertically and 45 partially into the lower end of the tube k, which action causes the match stem to be partially forced out where it can be grasped by the fingers and entirely pulled out. The rod r returns to its normal position when the 50 finger is removed because of the action of

A new match can be inserted in the tube k when the same is in the dotted position Fig. 1, after the burned match has been removed 55 or when the tube k is in the vertical position hereinbefore mentioned.

the expansible spring s.

The plates 7 within the case a that form the inner boundary to the match receptacles have their upper ends by preference above the up-60 per edges of the case a with the end turned over, as seen in the cross section Fig. 5. This does not in any way interfere with readily grasping the exposed end of the match. Within the cover b above its lower edge there 65 are plates 8 extending inwardly at right an-

gles from the cover plate, which plates when the cover is shut down on the case, rest upon the upper edges of the plates 7, and protect the ends of the matches. If the ignitible ends of the matches are placed uppermost, this con- 70 struction of the case completely protects said ends from the effect of sparks or pieces of the match being burned in the cover, that might fall thereon.

The case a and hinged cover b may be dec- 75 orated or ornamented in any desired manner, and the same forms a convenient, compact and desirable device for lighting cigars and cigarettes, without the risk of the flame blowing out.

I claim as my invention—

1. The combination in a cigar lighter, of a case, a shaft, a match carrying tube connected to the shaft and passing across the same, supports from the case for the shaft and tube, a 85 spring for actuating the shaft and match holder in one direction, means for holding the parts when the shaft is turned and the spring is under tension and for releasing the same, an igniter against which the match is rubbed 90 by the partial rotation of the match holder when released, a cover hinged to the case and having an opening therein adjacent to the match when lighted, substantially as set forth.

2. The combination in a cigar lighter, of a 95 case and a receptacle therein to receive matches, a shaft, a match carrying tube connected to the shaft and passing across the same, supports from the case for the shaft and tube, a spring for actuating the shaft and roo match holder in one direction, means for holding the parts when the shaft is turned and the spring is under tension and for releasing the same, a cover hinged to the case, a curved igniter within and connected to the cover and 105 against which the match is rubbed by the partial rotation of the shaft and match holder when released, said cover having an opening therein adjacent to the match when lighted substantially as set forth.

3. The combination with the case  $\alpha$  and hinged cover b, of a cross plate d, supports ee' rising from said cross plate, a shaft h and tube k connected together and carried by said supports which become bearings, the spring l 115 and notched disk m upon said shaft, the wheel i for rotating said shaft and match carrying tube, and the catch n for engaging the disk mand holding the match carrier in its positions and from which the disk is released to be oper- 120 ated by the spring l, substantially as set forth.

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4. The combination with the case  $\alpha$  and the hinged cover b, of the plate d, the rising supports e e', the shaft h and match carrying tube k connected together and carried in said sup- 125 ports, a spring for actuating the shaft and match holder, and means for holding and releasing the same, a push rod r in the plane of the tube k and actuated by the finger to assist in removing a broken match stem, and a 130 526,495

spring for returning the rod to its normal position, substantially as set forth.

5. The combination with the case a, the hinged cover b, a rotary match carrier and an igniter, of receptacles c for matches in the case, having plates 7 whose upper ends rise above the outer edge of the case, the plates 8 within the cover adapted to rest upon the up-

per edges of the plates 7, whereby the matches are protected, substantially as set forth.

Signed by me this 27th day of October, 1893.

GEO. W. LA BAW.

Witnesses:

GEO. T. PINCKNEY, HAROLD SERRELL.