

L. V. ARONSON.
LIGHTING APPLIANCE.
APPLICATION FILED MAY 28, 1910.

966,153.

Patented Aug. 2, 1910.

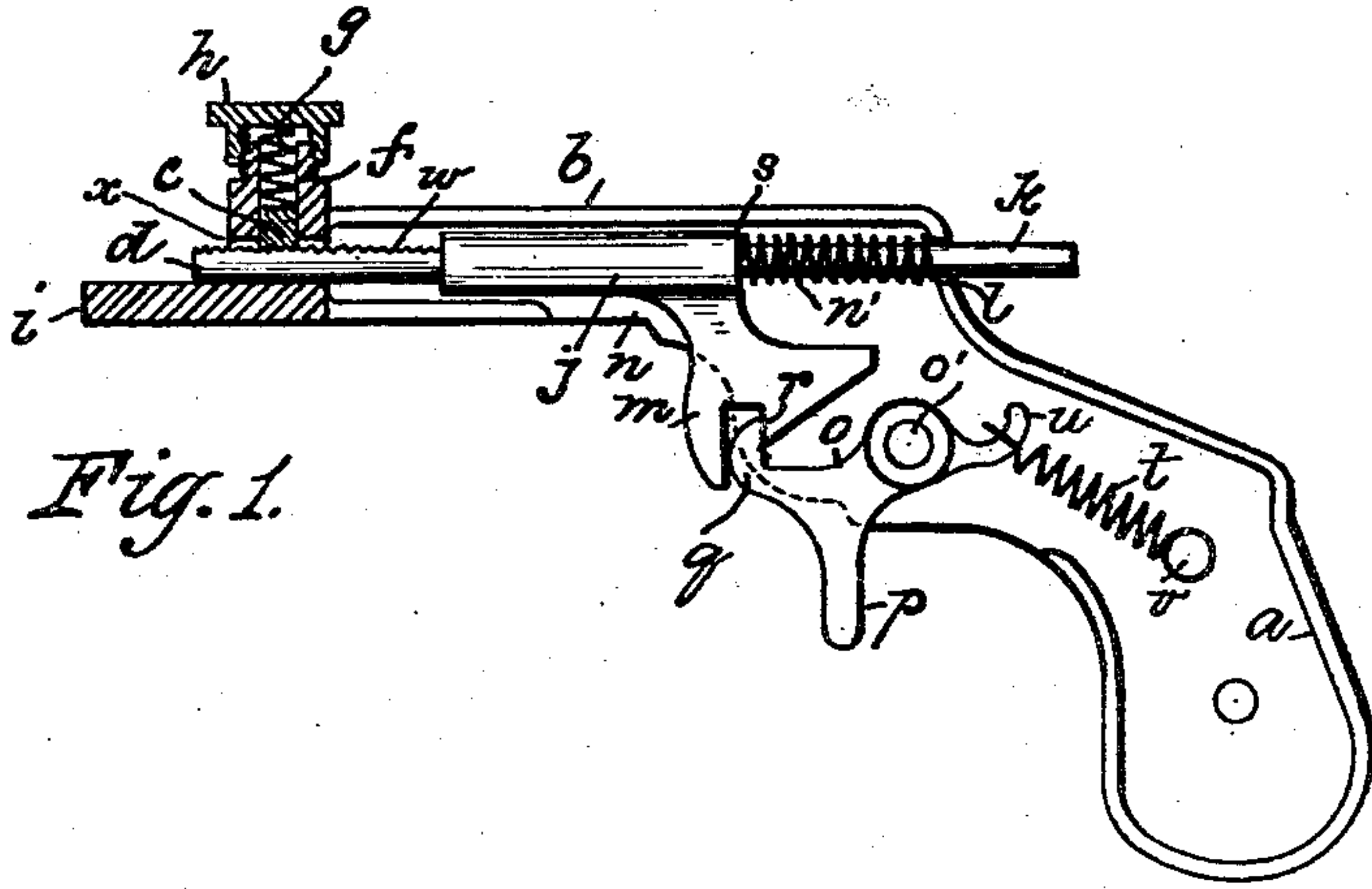


Fig. 1.

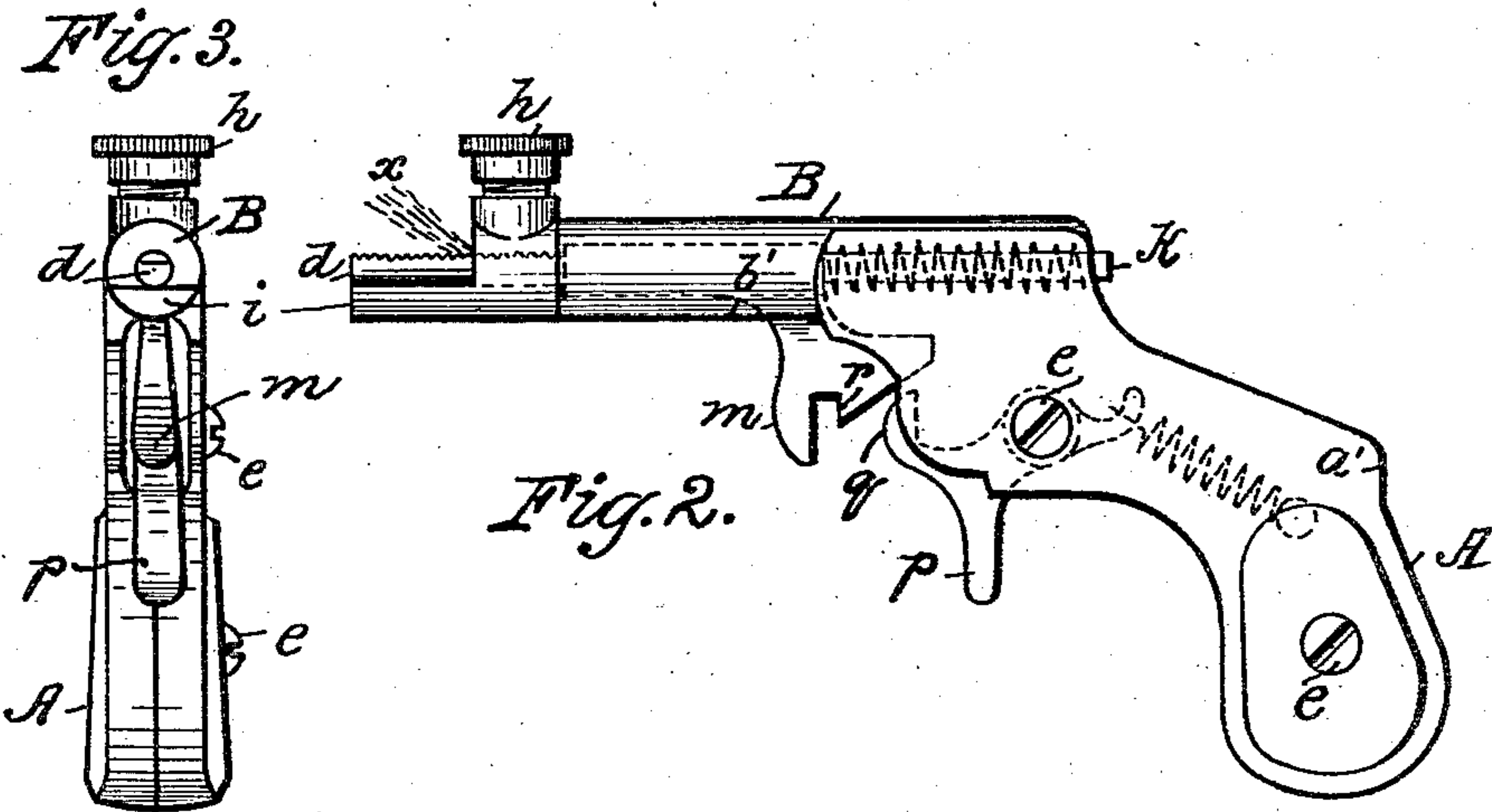


Fig. 2.

Fig. 3.

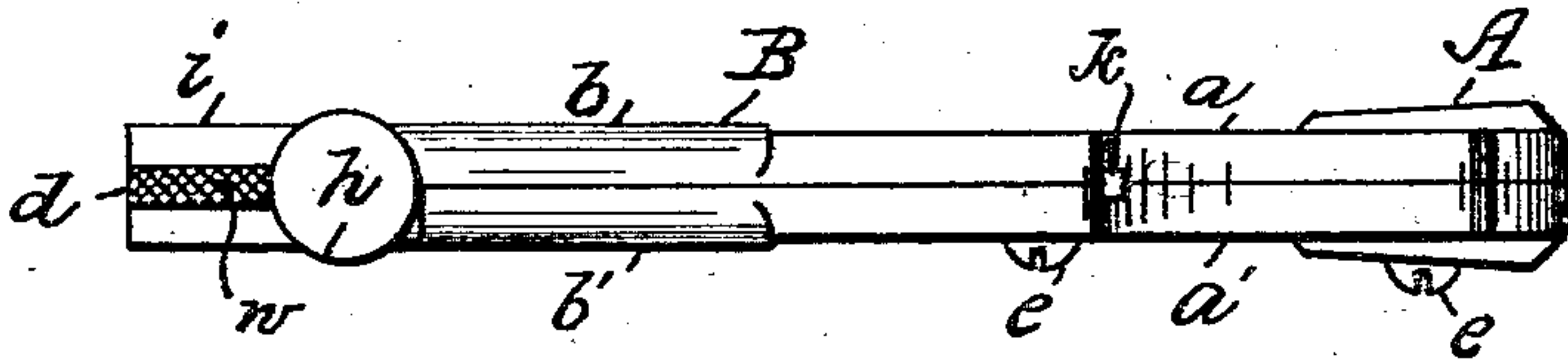


Fig. 4.

WITNESSES:

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LIGHTING APPLIANCE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LOUIS V. ARONSON, a citizen of the United States, residing in the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Lighting Appliances, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make, construct, and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, forming a part of this specification.

My invention relates to a lighting appliance or pocket lighter, wherein a casing of the general shape and outline of a revolver, is provided with a spark-producing element which is adjustably secured in the forward end of the casing, a spring actuated, reciprocating scratching element located within said casing and which passes through the forward end portion of the same in frictional engagement with the spark producing element, and means connected with said scratching element for forcing the same through the casing, and against the spark producing element.

In carrying out my invention, I make use of the structures illustrated in the accompanying drawings, wherein—

Figure 1 illustrates a side elevation of the lighting appliance with one of its sides removed. Fig. 2 illustrates a side elevation of the same; and Figs. 3 and 4 illustrate end and plan views of the same.

Similar letters of reference refer to like parts throughout the specification and drawings.

A represents the handle or stock, and B the barrel of my improved pocket lighter. These parts constitute the casing, in which are located the spark producing element *c*, the reciprocating scratching element *d* with its attached parts, and the means for forcing the scratching element through the barrel of the casing, and against the spark producing element *c*. The parts of the casing are each cast in halves, as shown in the drawings, as is common in the construction of pistols, the portions *a* and *b* which form one side of the handle and barrel being formed of a single piece, and the portions *a'* and *b'* which form the opposite side of the handle and barrel are also cast or formed in a single piece. These two half sections

extend longitudinally of the device, and are connected together by screws *e*. The two halves *b* and *b'* of the barrel are semi-circular in cross-section, so that when the two halves are secured together, they form a circular barrel B. The front portion *b* of the half of the barrel B is provided with a rectangular hollow open end *f*, which communicates with the interior of the barrel, said interior of the barrel at that point being reduced for the reception and positioning of the scratching element *d*. In this hollow open end, is located the spark producing element *c* which is kept in contact with the scratching element by a spiral spring *g*, which is acted upon by the knurled cap *h* which has screw-threaded engagement with the exterior of said rectangular hollow open end *f*. It will also be noted that the front portion *b* of the half of the barrel B is provided with an outwardly extending ledge *i* formed integral with the portion *b* and of a length corresponding with the end of the scratching element, when the same has assumed the position shown in Fig. 2.

The scratching element *d* is secured in any convenient manner to, or the same may be formed integral with, the sliding rod or bolt *j* arranged in the barrel B. One end of the bolt *j* is provided with a reduced portion *k*, the outer end of said reduced portion engaging with semi-circular bearings *l* formed in the adjacent sides of the two halves of the casing. The sliding bolt *j* is also provided with a downwardly extending finger piece *m* which projects outwardly through a slot *n* formed in the adjacent side of the two halves of the casing.

o represents the trigger pivoted between the two halves of the casing by a pivot or pin *o'* cast on the inner side of the portion *a* of the handle A, and engaging with an opening formed in the trigger. The trigger *o* is provided with a tail piece *p*, where the trigger is operated. The tail piece projects outwardly through the slot *n* formed in the adjacent edges of the portions *a* and *a'*.

q represents a nose or projection formed on the trigger and adapted to engage over a lug or shoulder *r* formed on the under side of the downwardly extending finger piece *m*, when the latter is moved inwardly, by pressing on the finger piece. When the finger piece *m* and its attached parts are moved inwardly, the spiral spring *n'* which surrounds the reduced portion *k* of the sliding

bolt *j* and which is interposed between the semi-circular bearings *l* and the shoulder *s* formed on the sliding bolt, is compressed. The nose *q* of the trigger is held in engagement with the lug *r* by a spiral spring *t*, one end of which is arranged on the projection *u* of the trigger *o*, and the other end arranged on a pin *v* cast integral with the portion *a* of the handle *A*.

10 When the finger piece *m* is locked and the spring *n'* compressed as shown in Fig. 1, any pressure applied to the tail piece *p* of the trigger *o* will cause the spring *n'* to force the sliding bolt *j* to which the scratching element *d* is attached, forward, causing the scratching element *d* which is provided upon its upper face with a suitable number of serrations or saw teeth *w*, to rub against the underside of the spark producing element *c*, which as previously stated, is held in frictional engagement with the upper face of the scratching element by means of the spiral spring *g* and cap *h*, thereby causing a shower of sparks to be emitted from the lighter, as indicated at *x*.

I am aware that changes may be made in the several arrangements of the various parts, as well as in the details of construction thereof, without departing from the scope of my present invention; hence I do not wish to be limited to the exact arrangements and combinations of the parts as herein shown and described, as obvious modifications will suggest themselves to those skilled in the art.

I claim:

1. A lighting appliance comprising a casing, a spark producing element secured within said casing, a reciprocating scratching element located within said casing in frictional engagement with said spark producing element and means pivotally secured in said casing and in engagement with said scratching element for operating said reciprocating scratching element.

2. A lighting appliance comprising a closed casing, a spark producing element adjustably secured within said closed casing, a spring actuated reciprocating scratching element located within said casing in frictional engagement with said spark produc-

ing element, and means pivotally secured in said casing and in engagement with said scratching element for operating said reciprocating scratching element.

3. A lighting appliance comprising an inclosing case open at one end, a spark producing element located within said inclosing case, a reciprocating scratching element mounted in said case, the scratching portion of said scratching element protruding from the open end of said case, means pivotally secured in said case and projecting through an elongated slot in the side thereof, whereby said scratching element may be operated.

4. A lighting appliance comprising an inclosing case open at one end, a spark producing element located within said inclosing case, a reciprocating scratching element mounted in said case provided with a finger piece projecting through a slot in the case, means pivotally secured in said case in engagement with said finger piece and projecting through said slot in the case, whereby the scratching element may be operated.

5. A lighting appliance comprising a closed casing, a spark producing element located within said casing, a reciprocating scratching element located within said casing in frictional engagement with said spark producing element, said reciprocating scratching element provided with a finger piece and means secured in said casing in engagement with said finger piece, whereby the scratching element may be operated.

6. A lighting appliance comprising a casing, a spark producing element adjustably secured within said casing, a spring actuated reciprocating scratching element located within said casing in frictional engagement with said spark producing element, said scratching element provided with locking means and means pivotally secured in said casing in engagement with said locking means, whereby the scratching element may be operated.

This specification signed and witnessed this 27th day of May, 1910.

LOUIS V. ARONSON.

Witnesses:

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