

No. 682,131.

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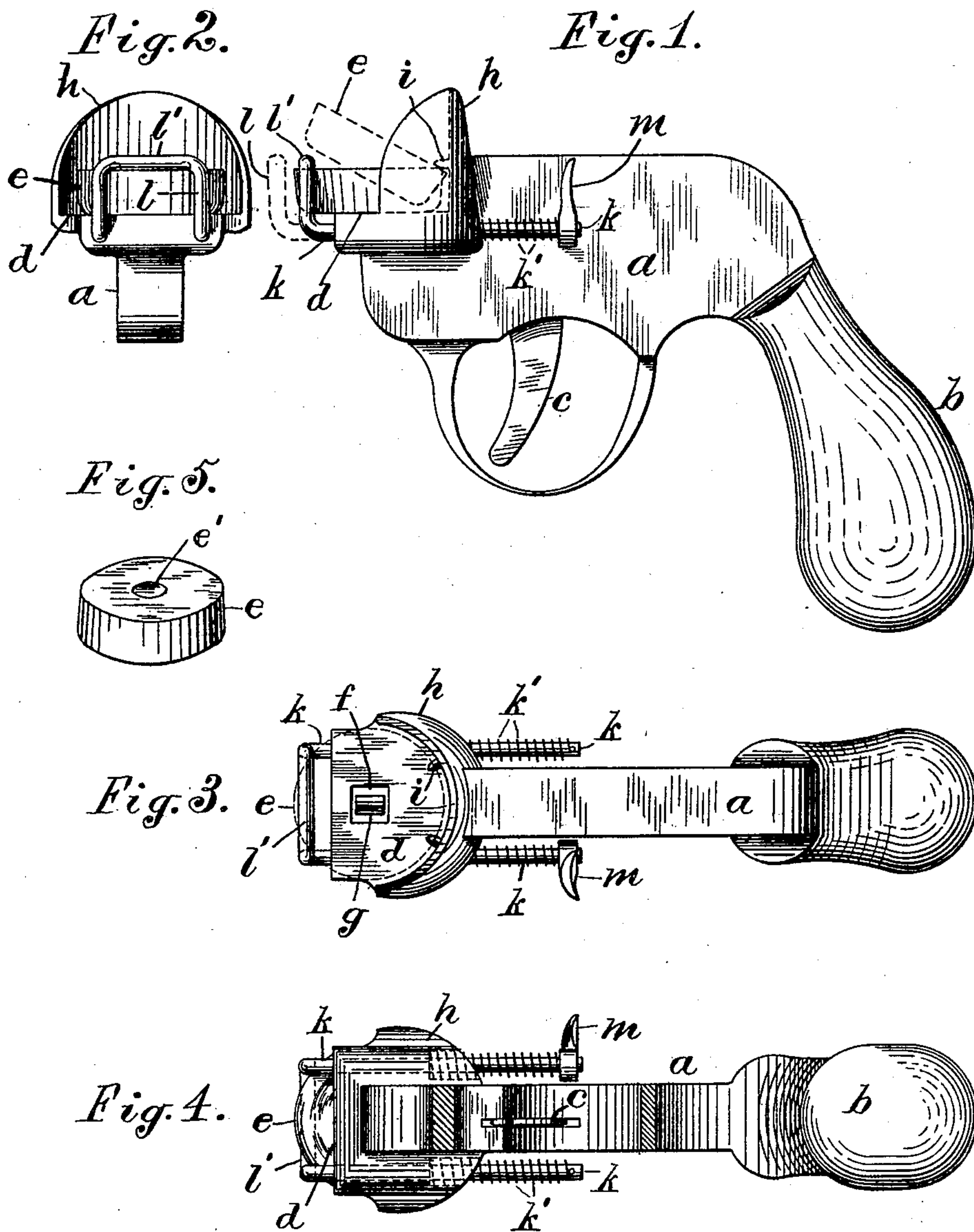
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PISTOL FOR FIRING FLASH LIGHT CARTRIDGES.

(Application filed Feb. 25, 1899. Renewed Aug. 6, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Attest:
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UNITED STATES PATENT OFFICE.

JAMES EDWARD BLACKMORE, OF NEWARK, NEW JERSEY.

PISTOL FOR FIRING FLASH-LIGHT CARTRIDGES.

SPECIFICATION forming part of Letters Patent No. 682,131, dated September 3, 1901.

Application filed February 25, 1899. Renewed August 6, 1901, Serial No. 71,031. (No model.)

To all whom it may concern:

Be it known that I, JAMES EDWARD BLACKMORE, a citizen of the United States, residing at Newark, county of Essex, State of New Jersey, have invented certain new and useful Improvements in Pistols for Firing Flash-Light Cartridges, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

The object of the present invention is to furnish a flash-light pistol adapted to explode cartridges of pan shape, such as are claimed in my patent application, Serial No. 652,237, filed September 20, 1897. These cartridges have a sheet-metal casing in the form of a pan, having bottom and sides, but are open upon the top to freely discharge the powder, and may be provided in the bottom with a so-called "cap" or "fulminate" for exploding the charge.

The present invention consists, broadly, in a pistol having a holder adapted to support the cartridge in proximity to the firing-hammer and to hold the open side of the pan exposed, so as to discharge the light freely into the air. The pistol shown herein is adapted to hold such pan-shaped cartridges with the upper side exposed and the under side, which is provided with a fulminate, in contact with a seat, through which the exploding-hammer operates. The seat which supports the cartridge is furnished with an upwardly-projecting shield at its rear edge to direct the flash upwardly and prevent the powder from flashing backwardly upon the hand which holds the pistol. The cartridge-pan is held upon the seat by a clamp, which is pressed by a spring toward the shield, and both the clamp and the shield are provided with projections which engage the upper edge of the cartridge-pan and hold it firmly down upon the seat to resist the blow of the hammer. The clamp is preferably actuated by a thumb-piece adjacent to the pistol-trigger, so that when one cartridge is discharged the clamp may be instantly opened by the operator's thumb and another one applied to the seat.

In the drawings, Figure 1 is a front elevation of the pistol, with dotted lines representing the position of the clamp and cartridge when inserting the latter. Fig. 2 is a front

elevation of the pistol with cartridge upon the seat. Fig. 3 is a plan of the pistol with circle upon the seat representing the cartridge. Fig. 4 shows the under side of the pistol with the trigger-guard in section adjacent to the body *a*; and Fig. 5 is a perspective view of one of the pan-like cartridges, showing the bottom side with the pocket containing the fulminate. The pistol-body is in practice made of cast metal in two halves separated longitudinally upon a vertical plane; but such separation is not indicated in Figs. 3 and 4, as it does not show upon the finished article. Fig. 6 is an inside view of one of the halves, showing the hollow cavity with the hammer mechanism therein.

a is the body of the pistol; *b*, the handle; *c*, the trigger, and *d* a horizontal flat seat upon the forward end to support the flat bottom of the cartridge-pan *e*.

The pocket *e'* for the fulminate is shown in Fig. 5 in the center of the bottom, where a paper cap is cemented to the pan, and at a corresponding point in the seat is formed an aperture *f*, through which the hammer *g* operates in the usual manner when the trigger is pulled. The bottom of the cartridge-pan is necessarily formed with a hole extending from the pocket *e'* to the interior of the pan to admit the flash generated by the explosion of the cap. The means for operating the hammer is illustrated in Fig. 6, where the hammer is shown formed upon a long lever *g'*, which is pivoted upon pin *n* and pressed normally upward by spring *o*. The lever of the trigger *c* overlies the hammer-lever *g'* and is pivoted upon pin *p*, which passes through a slot *o'* in the hammer-lever. The trigger-lever carries a pivoted pawl *q*, which engages a tooth *r* upon the hammer-lever. The slot *o'*, surrounding the pin *p*, permits the oscillation of the hammer upon its fulcrum *n*, and a stud *s*, projected from the hammer-lever into the slot, limits the movement of the trigger in opposite directions. A spring *t* holds the pawl *q* pressed normally into the tooth *r*, and a fixed lug *u* engages the tail of the pawl when the hammer is depressed, so that the final movement of the trigger when pulled backwardly to explode the cap detaches the pawl from the tooth *r* and permits the hammer to fly upward under the in-

fluence of the spring *o*. The hammer is shown in its central position, with the trigger pulled backwardly one-half, and dotted lines are shown in the figure representing the hammer in its extreme upper and lower positions. A curved shield *h* is projected upwardly at the rear edge of the seat and provided internally with two pins *i*, adapted to engage the top edge of the cartridge-pan when the latter is set upon the seat. The clamp shown herein is formed of a wire bent to form two guide-bars *k*, which extend through the body below the seat and project in the rear of the same, where springs *k'* are applied to press the bars toward the handle *b*. The front ends of the bars are united by a loop formed of upright bars *l* and horizontal bar *l'*, the former pressing upon the edge of the pan, while the bar *l'* passes over or engages its upper edge, like the pins *i*. The pan is thus held firmly down upon the supporting-seat. A thumb-piece *m* is applied to the rear end of one of the bars *k* to press the clamp forward, as shown by the dotted lines *l* in Fig. 1, to admit a cartridge-pan, which is inserted by inclining it beneath the pins *i*, as shown by the dotted lines *e*, and then pressing it down upon the seat and permitting the clamp to press it toward the shield. The bottom of the pan is then held in a position for the hammer *g* to explode the fulminate, and as the pins and bar *l'* do not cover any appreciable portion of the upper surface of the pan the powder has an unobstructed discharge upwardly, while the shield *h* prevents it from blowing backwardly upon the operator holding the handle *b*. It is immaterial how the clamp be formed to hold the pan against the blow of the hammer, provided the top of the pan be uncovered, so as to discharge the flash directly from the pan into the air, and the form of clamp or holder may therefore be modified without departing from the spirit of the invention.

Having thus set forth the nature of the invention, what is claimed herein is—

1. In a flash-light pistol, the combination of the body *a* having handle *b* and trigger *c*, and provided with the seat *d* adapted to support a pan-like cartridge having cap attached to the bottom, with the seat having an aperture, and the body of the pistol having a hammer arranged to operate through such aperture against the cap upon the bottom of the cartridge, and means for holding the bottom of the cartridge pressed down upon such seat to resist the upward blow of the hammer.

2. In a flash-light pistol, the combination, with the supporting-handle, having the seat *d* provided at its rear edge with an upwardly-projecting shield and adapted to support a pan-like cartridge as set forth, of a hammer operating through said seat, a clamping-jaw with spring for pressing it upon the outer edge of the cartridge-pan to hold it against the shield, and a thumb-piece for actuating such clamp.

3. In a flash-light pistol, the combination, with the supporting-handle, and the seat *d* provided at its rear edge with the upwardly-projecting shield *h* and adapted to support a pan-like cartridge as set forth, of a hammer operating through said seat, a pin within the shield to engage the rear edge of the cartridge-pan, a clamp adapted to engage the front edge of the cartridge-pan and press it toward the shield, a spring for pressing the clamp normally toward the shield, and a thumb-piece for actuating the clamp, substantially as herein set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JAMES EDWARD BLACKMORE.

Witnesses:

WM. SHURTE,
THOMAS S. CRANE.