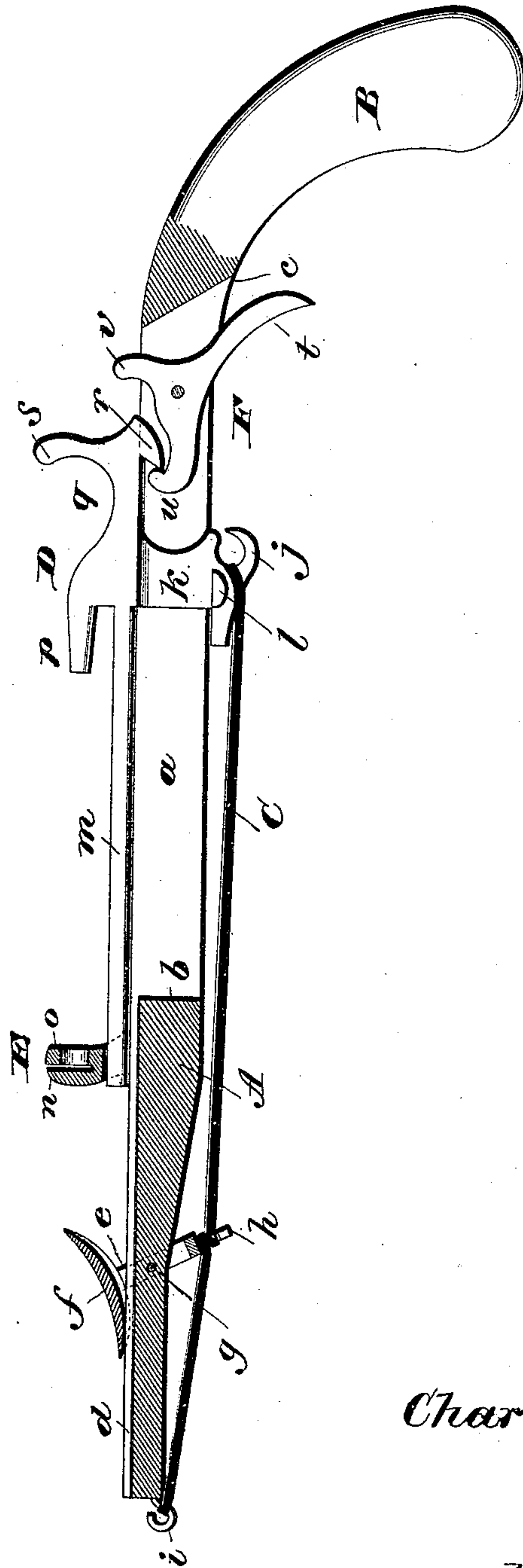


(No Model.)

C. A. ELLIS.  
TOY GUN.

No. 446,333.

Patented Feb. 10, 1891.



Charles A. Ellis.

Inventor

by

*[Signature]*  
Attorney

Witnesses  
*L. S. Elliott*  
*E. M. Johnson*

# UNITED STATES PATENT OFFICE.

CHARLES A. ELLIS, OF EAST GLOUCESTER, MASSACHUSETTS, ASSIGNOR OF  
ONE-HALF TO OZRO F. DAGLE, OF SAME PLACE.

## TOY GUN.

SPECIFICATION forming part of Letters Patent No. 446,333, dated February 10, 1891.

Application filed September 24, 1890. Serial No. 366,033. (No model.)

*To all whom it may concern.*

Be it known that I, CHARLES A. ELLIS, a citizen of the United States of America, residing at East Gloucester, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Toy Guns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to letters of reference marked thereon, which form a part of this specification.

This invention has reference to toy guns; and it consists in the improved construction hereinafter described and set forth, whereby a simple, cheap, and effective device is provided that will serve for the purpose intended and will properly retain the missile in position at all times to be projected, and enable a paper cap to be exploded under circumstances that will in no event injure or endanger the user.

In the accompanying drawing, forming part of this specification, the figure represents a longitudinal section, the trigger and projector being shown in full lines.

The horizontal stock A and curved handle B are made in one piece, and the said stock is provided with a vertically and horizontally extended slot or recess *a*, extending from a point represented by *b* to a point *c*, terminating at the upper part of the handle. The forward portion of the stock is provided with a longitudinal concaved groove *d* on its upper side, in order to guide the missile as it is projected from the gun. The said solid portion of the stock is embraced by a depending loop portion *e* of a missile-retainer, the upper portion of which consists of a curved block *f*, concaved on its under side. It will be noted that the depending loop is pivotally secured to the sides of the solid portion of the stock by means of a transverse pivoted pin *g*, while the lower transverse portion of said loop carries a projection *h*, to which is secured the elastic strip C, the forward end of which engages a hook *i* on the front end of the solid portion of the stock, while the rear end of

said strip engages a hook *j*, depending from the under side of the projector-block D. This block D is of the form shown in the figure and comprises a central vertical web *k*, which is guided in the slot *a*, while the lower part of the same above the hook *j* is provided with laterally-extending lugs *l*, which bear against the under face of the stock at each side of the slot and properly guide the block thereat. The upper part of the block is also laterally enlarged, in order to give it a bearing upon the upper surface of the stock at each side of the slot *a*, and is provided at its forward side with an extended cylindrical rod or projector *m*, which is guided in its longitudinal movement through the lower circular recess formed in an anvil E, integrally located on the upper side of the solid portion of the stock and spanning the channel *d* therein, which will be quite clear. The upper part of this anvil is vertically slotted in order to present two members *n* and *o*, the rear member *o* having a longitudinal opening therein, in order that the hammer-extension *p* of the projector-block D may pass through the same and strike the inner face of the member *n* when the projector-block is projected.

The anvil-block is further provided with a rear horizontally-extending portion *q*, terminating in a lower depending lip *r* and upper vertically-curved ear *s*. Within the rear portion of the slot *a*, and adjacent to the curved handle B, is pivotally secured a trigger F, which comprises the lower finger-extension *t*, upper forward hook *u*, and rear vertically-curved ear *v*.

The operation of the device will be obvious. The ear *s* is engaged by the finger so as to retract it to the position shown in the figure, so that the face of its lip *r* will contact with the ear *v* of the trigger and vibrate the trigger on its pivot, to the end that the hook *u* will engage the forward face of the lip and retain the block in its retracted position. The retraction of the block, as stated, causes the missile-retainer to be so moved on its pivot that its forward end will be forced down to the position shown and held in such position in order that the missile placed in the rear thereof will be properly held in position.



A paper cap may be inserted in the vertical slot between the members *n o*, and by rearwardly pulling the lower extension *t* of the trigger the projector-block *D* will be disengaged therefrom and the trigger act to project said block with its projector-rod *m* forward and simultaneously raise the retainer to a position that will enable said rod to forcibly project the missile from the channel of the stock. Of course the hammer *p* passes through the perforation in the member *o* and explodes the paper cap on the member *n* of the anvil. From the foregoing it will be obvious that the missile can only properly be retained in position as long as the block is being positively held or moved back, and that there will be no danger of a premature projection. Furthermore, the cap is exploded at quite a distance from the hand of the user, and all liability of injury from scorching or otherwise is avoided.

I claim—

1. The combination, in a toy gun or pistol, of a spring-actuated sliding block, a pivoted trigger with which said block engages, and a missile-retainer pivotally secured to the front portion of the stock in advance of the sliding block when retracted, substantially as set forth.
2. In a toy gun or pistol, the combination of the slotted stock, a spring-actuated sliding block adapted to be held retracted by a trigger, a missile-retainer pivoted to the stock, as shown, and provided with a depending portion with which a spring for actuating the sliding block engages, and a spring secured to the missile-retainer to move the same in an opposite direction from that moved by the spring which actuates the sliding block, for the purpose set forth.

3. The combination, in a toy gun, of the stock and handle, a missile-retainer pivoted to the stock, an elastic band connected with the stock and with said retainer, and a projector-block operated by said strip and having a hammer *p*, together with a cap-anvil, located on the forward portion of the stock adjacent to the retainer, substantially as set forth.

4. The combination, in a toy gun or pistol, of a stock having a longitudinal slot, a block secured movably therein, said block being provided with a forwardly-projecting rod, a depending catch for engagement with the trigger, an upwardly-extended portion for retracting the block, and a trigger pivoted to the stock and provided with portions *u* and *v*, with which the catch portion of the block engages for the purpose of setting the trigger and retaining the block.

5. The combination, in a toy gun, of the slotted stock having an upper anvil provided with lower longitudinal perforation, a projector-block sliding in said slot and having forwardly-extending rod *m* and hammer *p*, and a rear trigger-engaging portion, together with a trigger and projecting means, substantially as set forth.

6. The combination, in a toy gun, of the sliding block having hammer *p* and its projecting means, of an anvil having vertical slot to form members *n o*, the latter having a longitudinal perforation for the passage of the hammer, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES A. ELLIS.

Witnesses:

BENJ. H. CORLISS, Jr.,  
RICHARD C. STEELE.