No. 675,315. Patented May 28, 1901.

E. T. ADAMS & J. E. SIMPSON.

TOY PISTOL.

(Application filed Sept. 26, 1900.)

(No Model.)

Fig. 1

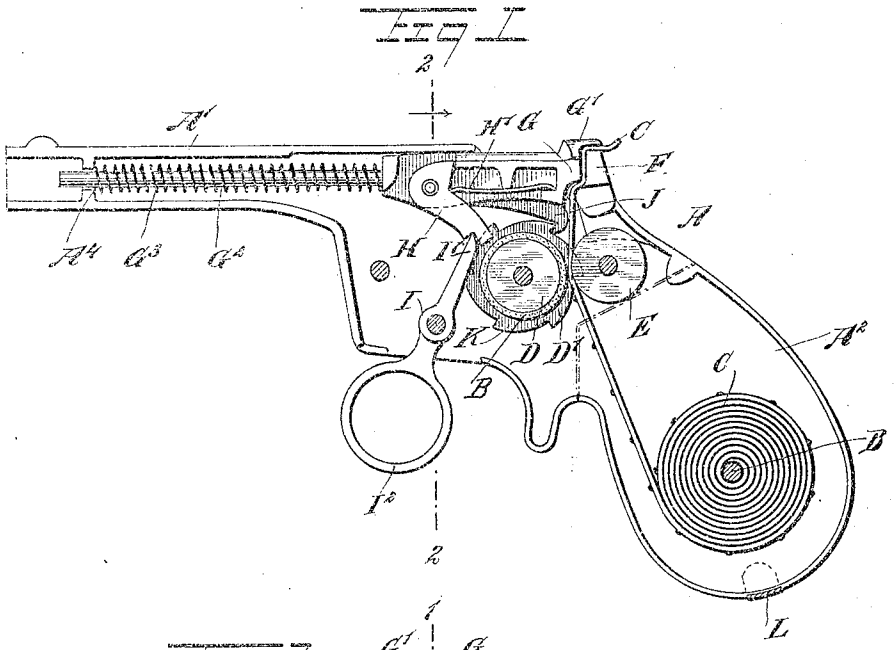


Fig. 2

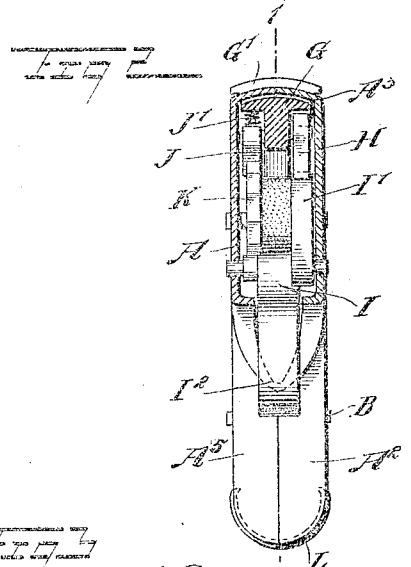
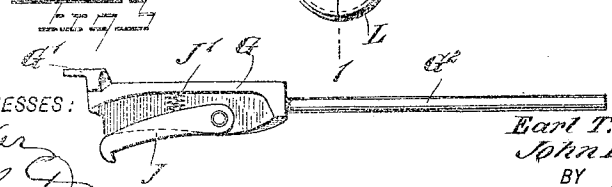


Fig. 3



WITNESSES:

H. H. Walker

Rud. J. Hoster

INVENTORS

Earl T. Adams.

John E. Simpson.

BY

Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

EARL T. ADAMS AND JOHN EBON SIMPSON, OF PORTSMOUTH, OHIO.

TOY PISTOL.

SPECIFICATION forming part of Letters Patent No. 675,315, dated May 28, 1901.

Application filed September 26, 1900. Serial No. 31,137. (No model.)

To all whom it may concern:

Be it known that we, EARL T. ADAMS and JOHN EBON SIMPSON, citizens of the United States, and residents of Portsmouth, in the county of Scioto and State of Ohio, have invented a new and Improved Toy Pistol, of which the following is a full, clear, and exact description.

The invention relates to toy pistols having a moving tape or strip with spaced percussion-caps thereon; and the object of the invention is to provide a new and improved toy pistol which is simple and durable in construction, not liable to get out of order, easily manipulated, and arranged to permit of exploding a large number of caps in rapid succession and without the slightest danger of burning the operator.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional side elevation of the improvement on the line 1 1 in Fig. 2. Fig. 2 is a transverse section of the same on the line 2 2 in Fig. 1, and Fig. 3 is a side elevation of the hammer.

The improved toy pistol is provided with a stock A, formed with an imitation barrel A′ and a suitable handle A^2, adapted to be taken hold of by the operator in manipulating the pistol, as hereinafter more fully described. In the hollow handle A^2 extends transversely a pin B, adapted to receive a roll of percussion-caps C, preferably made of a suitable tape and having caps spaced thereon, as is plainly indicated in Fig. 1, the tape extending between feed-rollers D and E, journaled in the stock A and arranged to intermittently feed the tape, as hereinafter more fully described. The tape, with the caps thereon, extends upward from the feed-rollers D and E upon an anvil F, integral with the stock A, and on which anvil the caps are successively exploded by a suitable hammer G, mounted to slide longitudinally in the barrel A′. The rear end of the hammer G is provided with a top extension G′, adapted to reach over the anvil F and prevent sparks from falling rearwardly toward the operator when exploding a cap by the action of the hammer striking a cap on the anvil. The extension G′ engages a guideway A^3 on the stock to insure proper sliding of the hammer. The forward end of the hammer is formed with a rod G^2, mounted to slide in a suitable bearing A^4 in the barrel A′, and on said rod is coiled a spring G^3 for pressing the hammer G rearwardly to explode the cap on the anvil. On one side of the hammer G is pivoted a pawl or sear H, pressed on by a spring H′ and adapted to be engaged at its free end by the upper end I′ of a trigger I, pivoted in the stock A and having its finger-piece I^2 extending to the outside of the stock to be within convenient reach of the operator.

When the several parts are in the position shown in Fig. 1 and the operator presses the finger-piece I^2 rearward, then the end I′ of the trigger imparts a forward motion to the sear H, so that the hammer G is caused to slide forward against the tension of its spring G^3. The end I′ of the trigger finally slides off the sear H, so that the hammer G is forcibly moved backward by the action of its spring G^3, so as to explode the cap held on the anvil F at the time.

The feed-wheels D and E serve to feed the tape with the percussion-caps intermittently in an upward direction, and in order to give the desired movement to the tape the feed-wheel D is intermittently rotated from the hammer G. For this purpose the hammer carries on one side a pawl J, pressed on by a spring J′ and adapted to engage a ratchet-wheel K, secured on one side of the feed-wheel D. The peripheral surface of the latter is covered with leather, rubber, or other soft material B′ to produce the necessary friction between the feed-wheels and the tape, so that when the feed-wheel D is rotated the tape, with the percussion-caps, is fed upward, so as to bring a new percussion-cap to the anvil. When the hammer G is moved forward, as previously explained, then the pawl J turns the ratchet-wheel K to feed the strip with the percussion-caps, as described, and when the hammer G moves rearward then the pawl J glides over the ratchet-wheel

K and engages another tooth at the time the hammer G reaches the end of its rearward stroke.

In using the device it is only necessary for the operator to manipulate the finger-piece I^2 of the trigger I, as during the rearward movement of said finger-piece the hammer G is forced forward against the tension of its spring, and when the trigger finally releases the sear H then the hammer G slides back and explodes the cap on the anvil F, and on the forward movement of the finger-piece I^2 the end I' of the trigger again engages the free notched end of the sear H, so that upon the next rearward movement of the finger-piece the hammer G is again moved outward, as above explained.

From the foregoing it is evident that the toy pistol is very simple and durable in construction, is not liable to get out of order, and by the construction of the hammer the operator is completely protected from flying sparks incident to the explosion of a cap, so that the operator is not liable to be burned.

The handle A^2 of the stock A is provided with a removable side plate A^5 to give convenient access to the interior of the handle and the pin B for placing a new roll of percussion-caps upon the pin B whenever necessary. The removable side plate A^5 is held in place on the stock G by a U-shaped spring L, fitting into a groove formed partly on the stock and partly on the side plate at the lower ends thereof. The spring can be readily slipped out of the groove by the operator to permit of removing the side plate for the purpose mentioned.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. A toy pistol, comprising a stock having an anvil, a spring-pressed hammer mounted to slide on the stock, a spring-pressed sear pivoted on said hammer and having its free end notched, a trigger adapted to engage said notched end of the sear, to impart a sliding motion to the hammer against the tension of its spring, and to slide off said sear and release the hammer, and a feed device operated by the hammer for feeding a tape having percussion-caps thereon to the anvil, as set forth.

2. A toy pistol, comprising a stock having an integral anvil, a hammer mounted to slide longitudinally in said stock in alinement with said anvil, a spring pressing said hammer, a spring-pressed sear pivoted on the hammer, a trigger for engaging said sear, a feed device for feeding a tape having percussion-caps to said anvil and means whereby the feed device is operated from the hammer, as set forth.

3. A toy pistol, comprising a stock having an integral anvil, a hammer mounted to slide longitudinally in said stock in alinement with said anvil, a spring pressing said hammer, a spring-pressed sear pivoted on the hammer, a trigger for engaging said sear, and a feed device for feeding a tape having percussion-caps to said anvil, said feeding device comprising two rollers journaled in the stock and between which passes the tape having the percussion-caps, a ratchet-wheel on one of said rollers, and a pawl pivoted on said hammer and engaging said ratchet-wheel, as set forth.

4. A toy pistol having a stock with a hollow handle, a removable side plate for the said handle, and a spring for holding the said side plate to the handle, as set forth.

5. A toy pistol having a stock with a hollow handle, a removable side plate for the said handle, and a spring for holding the said side plate to the handle, the said spring being U-shaped and arranged to fit into a seat partly on the handle and partly on said side plate, as set forth.

6. In a toy pistol, the combination with a stock, and an anvil thereon, of a spring-pressed hammer mounted to slide on the stock and provided with an extension projecting over the anvil, and means for operating the hammer, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

EARL T. ADAMS.
JOHN EBON SIMPSON.

Witnesses:
WM. Q. ADAMS,
GEO. A. PHILLIPPI.