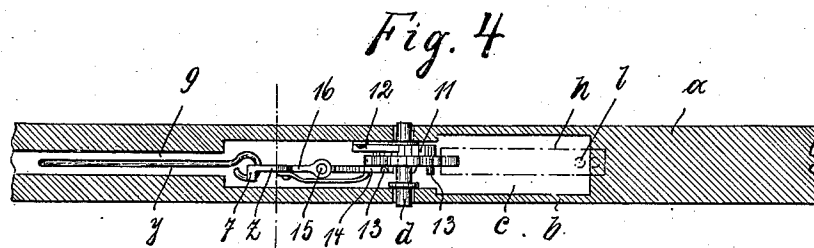
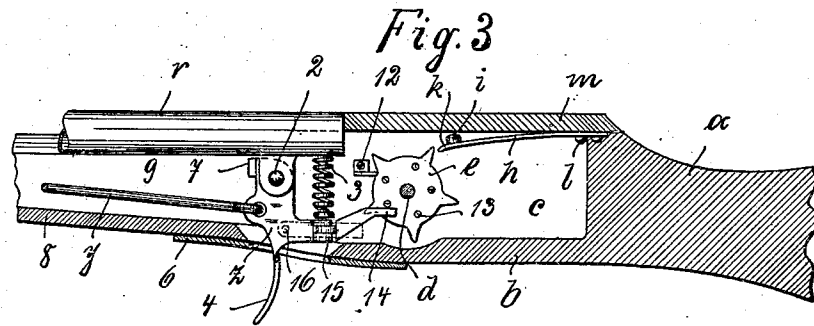
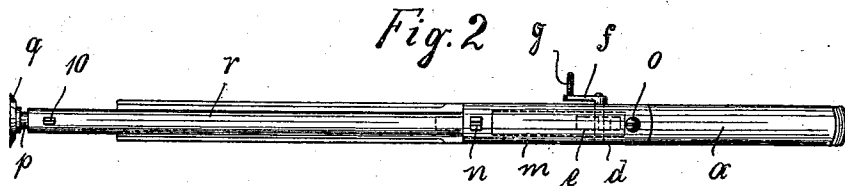
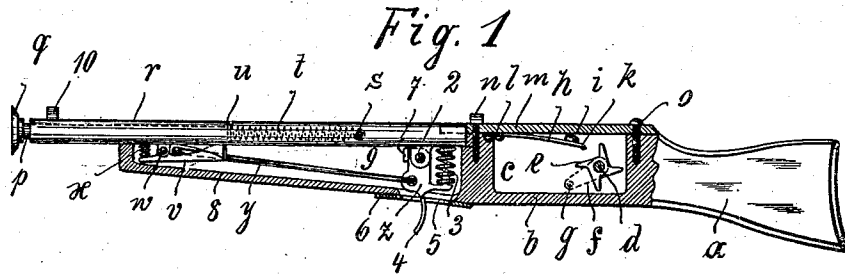


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TOY RIFLE, GUN, AND THE LIKE ARM.
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938,081.

Patented Oct. 26, 1909.



Witnesses:

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GEORG SCHRÖDEL, OF NUREMBERG, GERMANY.

TOY RIFLE, GUN, AND THE LIKE ARM.

938,081.

Specification of Letters Patent.

Patented Oct. 26, 1909.

Application filed February 8, 1909. Serial No. 476,727.

To all whom it may concern:

Be it known that I, GEORG SCHRÖDEL, whose post-office address is No. 18 Maiachstrasse, Nuremberg, Bavaria, Germany, have invented certain new and useful Improvements in and Relating to Toy Rifles, Guns, and the Like Arms; 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.

The invention relates to an improved toy rifle, gun or the like for children, the special feature of the same being that the toy projectile may be discharged and a noise resembling the characteristic report of a shot being fired may be produced.

Two forms of carrying the invention into effect are shown in the accompanying drawing by way of example.

Figures 1 and 2 show the first form in longitudinal section and plan view respectively. Figs. 3 and 4 show a modification in a vertical and horizontal cross-section respectively.

A hollow space or chamber *c*, is provided in the part *b*, of the stock of the rifle adjoining the butt *a*. In the said chamber a star wheel *e*, is mounted on a pin or spindle *d*. A crank *f*, provided with a handle *g*, is mounted on the pin *d*, outside the stock chamber. This crank serves for rotating the pin *d*, and also the star wheel *e*. The star wheel *e*, engages a nose *k*, of a spring *h*, which is secured at *l*, inside the stock, and provided with a knob *i*, extending upward. The chamber *c*, is covered at the top by a lid *m*, which is detachably secured to the stock by means of screws *n* and *o*. The head of the screw *n*, projects beyond the upper side of the lid *m*, and at the same time constitutes the sight.

In the front portion of the stock the device for throwing out the projectile is arranged. The projectile consists of a toy arrow *p*, which is inserted from the outside into the barrel *r*, and in doing so a compression spring *t*, secured to a pin *s*, in the barrel is compressed. A locking lever *v*, engages the collar *u*, of the end of the toy arrow, which lever is adapted to turn about a pivot *w*, and is depressed by a spring *x*. A small rod *y*, serves for releasing the lever *v*, which rod is hinged to the trigger lever *z*. The lever *z*, is adapted to turn about a pivot 2 and is acted upon by a spring 3, and car-

ries the handle 4 which passes through the slot 5 of the extension or casing 6 of the stock. A stop 7, limits the forward movement of the lever *z*. The trigger mechanism described above is arranged in the chamber 9, of the front portion 8 of the stock. On the top of the front end of the barrel is arranged the front sight 10 coöperating with the back sight *n*. The arrow or projectile *p*, is forced into the barrel against the action of the spring *t*, to such an extent that the collar *u*, of the arrow engages behind the lever *v*, which lever secures the arrow in the barrel. If the projectile is to be discharged from the barrel, the trigger lever *z* is so turned by pressure exerted on the handle 4 about the pivot 2, that the front end of the rod *y*, causes the lever *v*, by turning the lever about its pivot *w*, to disengage from the collar *u*, of the arrow *p*. The arrow, thus released is propelled out of the barrel by the spring *t*. The spring 3, after the release of the handle 4, returns the trigger lever 2 into its initial position limited by a stop 7. In addition to the ejection of the projectile, a noise resembling the report of a shot being fired may be produced. For this purpose the crank *f*, together with the pin *d*, is turned, by taking hold of the handle *g*. Owing to this the arms of the small star wheel *e*, securely mounted on the pin *d*, come forcibly into contact one after the other with the nose *k*, of the spring *h*, which spring, as soon as the same is released by one arm of the star wheel, bounds back in the upward direction, in order to strike with its knob *i*, upon the lid *m*. The impact of the knob *i* against the lid produces a sound similar to the report of a shot. By the repeated impact of the knob *i* against the lid, effected by a continual revolution of the crank *f*, a noise is produced which is similar to that produced when firing in quick succession.

The stock of the toy gun including the lid *m* consists of wood.

The handles *g* and 4, may be operated simultaneously, as the child or person using the gun actuates the trigger lever *z* with the left hand holding the front portion of the stock, and with the right hand, supporting the rear portion of the stock actuates the crank *f*.

The modification shown in Figs. 3 and 4 differs from the form of invention described above inasmuch as the trigger mechanism

serving for ejecting the projectile is combined with the device for producing the noise peculiar to the report of shots being fired, in such a way that both devices have to be actuated by the same trigger. The star wheel *e* acting as before on the nose *k* of the spring *h*, coming into collision with the lid *m* with its knob *i*, is in this modification of a somewhat different shape, and is provided with a ratchet wheel 11, in which a resilient pawl 12 engages in order to permit the wheels *e* and 11 only to revolve in one direction. The pin or spindle *d*, carries both wheels *e* and 11 and is mounted at both sides in the portion *b* of the stock. It is, however, in contradistinction to the first form not provided with an actuating or driving crank. Several pins 13, however, are secured to one side of the disk *e* which are chamfered and serve for engaging an arm 14. The arm 14 is connected to the trigger lever *z*, by means of the hinge or pivot 15, in such a manner that it can only turn a little in the lateral direction. A spring 16 presses the arm 14 continually against the disk. When the handle 4 is operated so that the trigger lever *z*, turns about the pin 2 toward the rear, the small rod *y* in the manner described above effects the release of the locking lever *v*, and consequently the ejection of the projectile from the barrel. By turning the trigger *z*, the arm 14 is moved upward in order to press on the pin 13 situated above the arm and thus moves the wheel *e* with a jerk through one division. When doing so, an arm of this wheel encounters the nose *k* of the spring *h*, and causes the knob to collide with the lid *m*. A simultaneous ejection of the projectile and a report are therefore obtained. If the handle 4 is released, the spring 3 returns the lever *z*, into its initial position, and the arm 14 passes over one of a number of pins 13, situated below the arm as the arm 14 turns sidewise about the pivot or hinge 15. As soon as the arm 14 has passed over the particular pin, it is pressed against the disk *e* by the spring 16 in order to move the pin 13 situated above the said arm in the upward direction, when pressure is next exerted on the handle 4 of the trigger lever *z*.

What I claim and desire to secure by Letters Patent is:

1. A toy gun comprising in combination, a barrel adapted to receive and provided

with mechanical means for expelling a projectile, trigger mechanism for retaining and releasing the projectile, a rotatable star wheel provided with beveled pins, a pivotally mounted spring actuated arm on said trigger mechanism for engaging said pins to rotate said wheels, means preventing rotation of said wheel in one direction, and means actuated by said wheel for simulating an explosive report.

2. A toy gun comprising in combination, a barrel adapted to receive and provided with mechanical means for expelling a projectile, trigger mechanism for retaining and releasing the projectile, a rotatable star wheel provided with beveled pins, a pivotally mounted spring actuated arm on said trigger mechanism for engaging said pins to rotate said wheels, and means actuated by said wheel for simulating an explosive report.

3. A toy gun comprising in combination, a barrel adapted to receive and provided with mechanical means for expelling a projectile, trigger mechanism for retaining and releasing the projectile, a rotatable member, an element actuated by said member for simulating an explosive report, and a device on said trigger mechanism for actuating said member.

4. A toy gun comprising in combination, a barrel adapted to receive and provided with mechanical means for expelling a projectile, trigger mechanism for retaining and releasing the projectile, a movable member, an element actuated by said member for simulating an explosive report, and a device on said trigger mechanism for actuating said member.

5. A toy gun comprising in combination, a barrel adapted to receive and provided with means for expelling a projectile, trigger mechanism for retaining and releasing the projectile, a rotatable member, an element actuated by said member for simulating an explosive report, and a device on said trigger mechanism for actuating said member.

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

GEORG SCHRÖDEL.

Witnesses:

ALEXANDER WEILE,
OSCAR BOCK.