

Russel Frisbie's Imp^{ts} in Toy Guns.

Assigned to J. & E. Stevens & Co.

PATENTED

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74904

Fig 1.

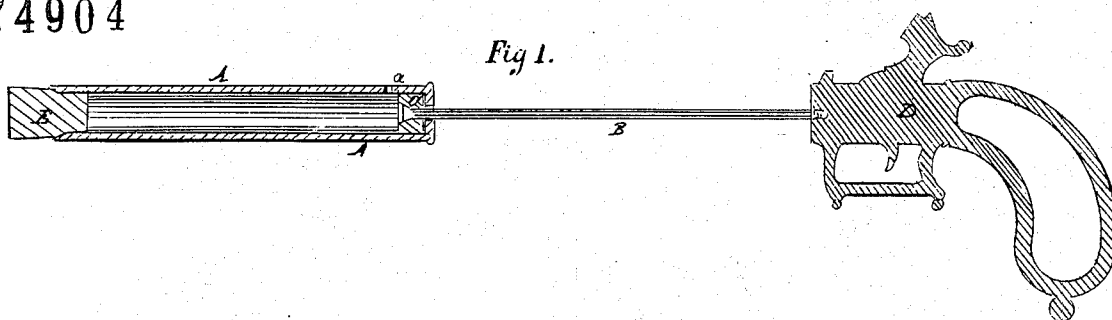
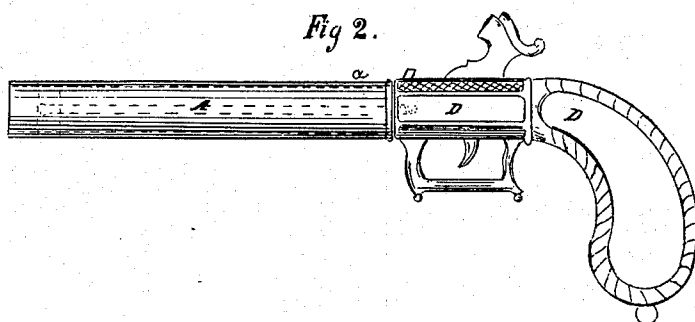


Fig 2.



Witnesses.

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RUSSEL FRISBIE, OF CROMWELL, CONNECTICUT, ASSIGNOR TO J. AND E. STEVENS & CO.

Letters Patent No. 74,904, dated February 25, 1868.

TOY-PISTOL.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, RUSSEL FRISBIE, of Cromwell, in the county of Middlesex, and State of Connecticut, have invented a new and useful Improvement in Toy-Guns; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a portion of this specification, in which—

Figure 1 is a longitudinal section of a toy-gun constructed according to my invention.

Figure 2 is a side view of the same.

Similar letters of reference indicate corresponding parts in both figures.

In that class of toy-guns in which the missile is ejected by the compression of air by a piston working in a suitable barrel, and in which the air is admitted to the said barrel only at the mouth or muzzle thereof, it is necessary, in order to insure the proper ejection of the missile, to bring the piston back to the rear end of the barrel previous to charging the same with the said missile, and, inasmuch as young children are not always capable of comprehending this necessity, it follows that the missile is frequently inserted in the barrel without the requisite previous backward movement of the piston, and the consequent non-ejection of the missile by the forward movement of such piston becomes a source of annoyance to the child, and materially reduces the value of the toy as a source of amusement.

The object of this invention is to obviate this objection; and it consists in an orifice or vent, provided at the rear end of the barrel, and in such relation with the piston as to admit air to the barrel, in front of the piston, when the latter is drawn back, so that the proper expulsion of the missile by the former movement of the piston is secured, no matter what the position of the piston may be when the missile is placed in the barrel, as hereinbefore mentioned.

To enable others to understand the nature and construction of my invention, I will proceed to describe it with reference to the drawings.

A shows the barrel of the toy through a suitable hole, in the closed inner end of which is passed a stem, B, having fixed to its extremity a piston or plunger; C, which works nearly or quite air-tight within the barrel. The opposite or rear end of the stem B is secured on a suitable stock, D. Provided in the one side of the barrel A, near the inner or rear end thereof, and in such relation with piston C as to be situated forward of the same when the said piston is drawn quite back, as shown in fig. 1, is an orifice or vent, *a*.

The missile, E, may consist of a common cork, and, when it is desired to use the toy, is fitted into the mouth or open end of the barrel A, as shown in fig. 1, which being done, the piston E is drawn back by means of the stock D and stem B, the air behind the piston passing out through the orifice or vent *a*, until the piston is brought back of or behind the said vent, whereupon the air passes inward through such vent to fill the vacuum in the barrel caused by the withdrawal or backward movement of the piston. This being done, the piston is forced forward, and compresses the air in the barrel between it and the cork or missile E, until the accumulated pressure ejects the said cork or missile from its place in the mouth of the barrel with an explosive noise or report, the loudness of which is proportioned to the degree of compression to which the air in the barrel is subjected by the forward movement of the piston, as just herein set forth.

The piston may, of course, be drawn back before placing the missile in the mouth of the barrel, if desired, and the proper operation of the toy being secured by the means set forth, no matter in what position the piston may be when the missile is inserted in its place, the value of the toy, as a means of amusement for children, is materially enhanced, as compared with those in which it is required to draw back the piston, before fitting the missile in the barrel, in order to secure the proper expulsion of such missile by the forward movement of the piston.

What I claim as my invention, and desire to secure by Letters Patent, is—

The toy-gun, having its barrel provided with an orifice or vent, *a*, arranged, in relation with the piston C, to operate substantially as and for the purpose specified.

RUSSEL FRISBIE.

Witnesses:

JOSEPH M. WATERS,
E. C. PHELPS.