UNITED STATES PATENT OFFICE.

ALBERT SCHÖNHUT, OF PHILADELPHIA, PENNSYLVANIA.

SPRING AIR-GUN.

Application filed November 10, 1900. Serial No. 85,113. (No model.)

To all whom it may concern:

Be it known that I, ALBERT SCHÖNHUT, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain improvements in Spring-Guns, of which the following is a specification.

My invention relates to certain improvements in toy spring-guns, having for its object the provision of a gun easier and cheaper to manufacture than heretofore and which will not easily get out of order. This object I attain as hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view of my improved gun. Fig. 2 is a cross-sectional view on the line 2-2, Fig. 1, showing the construction and method of attachment of the spring-retaining block. Fig. 3 is a cross-sectional view on the line 3-3, Fig. 1, clearly showing the structure of the improved trigger-spring. Fig. 4 is a cross-sectional view on the line 4-4, Fig. 1, indicating the means for holding the outer end of the barrel to the stock. Fig. 5 is a perspective view of the stock and barrel when assembled, showing the details of construction of the same, the barrel being inverted; and Fig. 6 is an enlarged sectional view of the breech end of the barrel, showing the method of attaching the same to the stock.

In the drawings, A is the stock of the gun, and B the barrel, the stock being recessed for the barrel so as to preferably enclose about half of the diameter of the same. This barrel is left open at the breech end, as in Fig. 5, and is cut away on the lower side at the rear end to form a longitudinal opening C, extending from in front of a Y-shaped block D, connected to the stock to the rear end of the gun.

Soldered or otherwise attached to the under side of the barrel is a piece of metal E, fitting into a slot F in the stock. A pin e is constructed to fit a hole through the stock and to pass through a corresponding hole e' in the piece E, thus serving, in part, to hold the barrel to the stock. It will be understood that I may replace the piece of metal E and the pin e with one or more bands of metal, as g, encircling both the stock and the barrel.

A plunger H, of a type common to toys of this class, is fastened to one end of a rod h, of wood or other suitable material. On the other end of the rod is similarly attached a wooden cylinder H', having in its rear end a screw-eye h'. The Y-shaped block D, glued or otherwise held in a recess in the stock, confines between itself and the plunger H a spring M, by the action of which projectiles may be expelled from the gun. A washer m is placed between the spring and the block D.

A flanged breech-piece N is firmly held to the stock by any suitable means, in the present instance by a nail, and is made of a diameter to receive and hold the end of the barrel B. A projection n on this latter is made to enter a slot n' in the breech-piece and is turned down, thereby holding the barrel firmly to the said breech-piece. This breech-piece has a circular hole through it, to which is adapted an eyelet n'', the edges of which are smooth and rounded. A flexible cord L is connected to the cylinder or plug H' by the screw-eye h' and passes through the eyelet n'' in the breech-piece, the said eyelet preventing the cord from being cut or frayed by its passage through the same.

A trigger P, of the form common to toy guns, engages the loop of an L-shaped double spring-catch P', constituting the sear, the forward end of which is held or driven into the body of the stock. It is so made that it tends to remain in the position shown in Fig. 1, and when the cylinder H' is drawn back against the force of the spring M the sear P' is depressed, allowing the cylinder to pass over it, and then springing up and retaining the latter. The looped double form of this spring-catch provides a convenient means of attachment for the trigger and is one very easy to manufacture and to assemble. A guard L is attached to the stock and extends around the trigger.

A cork is adapted to fit into the end of the barrel. When the gun is discharged, the cork being in the barrel, air is compressed by the piston or plunger H and the cork is driven from the barrel with an accompanying pop, common to toys of this class. The cork may be secured to the gun by a short string, if desired.

I claim as my invention—

The herein-described improvement in toy guns consisting of a stock, a breech-cap having an eyelet, and a slot therein secured to
said stock, a barrel having its lower rear portion cut away to form a longitudinal opening, a Y-shaped block attached to the stock and extending through the said opening, a projection on the rear end of the barrel passing through the slot in the breech-cap and bent so as to retain the barrel in engagement with the cap, means for confining the body of the barrel to the stock, expelling mechanism, consisting of a rod, a plunger thereon, a spring interposed between the plunger and the Y-shaped block, a second plunger on the rear end of the rod, a sear for engaging said second plunger, a trigger for releasing the said sear, a cord secured to the rear end of the rod and passing through the eyelet to the breech-cap, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

Witnesses:
ALBERT SCHOENHUT.

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