March 2, 1926. 1,575,189

A. J. CHAREST

TOY GUN

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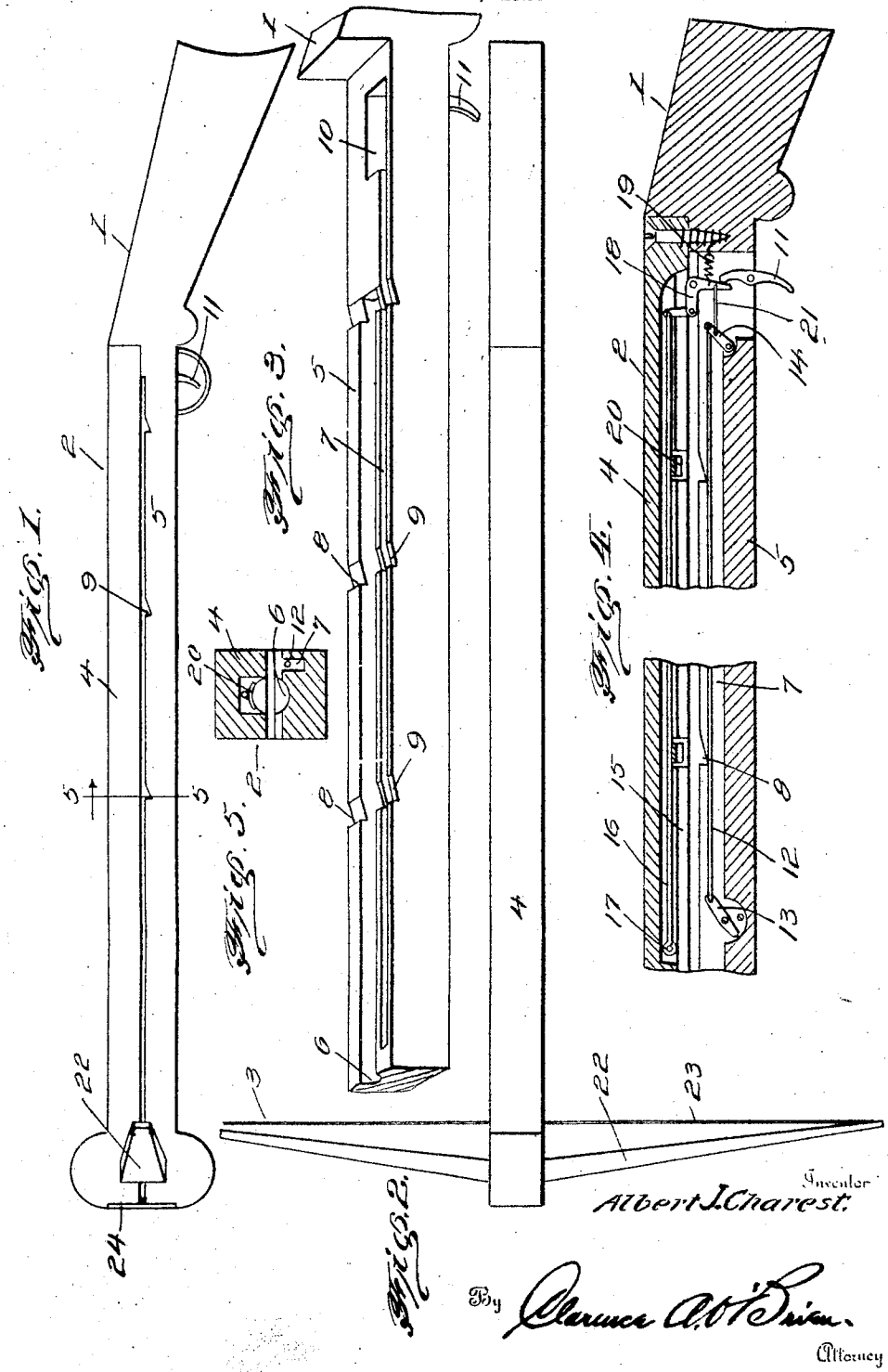


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Inventor
Albert J. Charest.

By Clarence A. O'Brien.
Attorney

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ALBERT JOSEPH CHAREST, OF WOONSOCKET, RHODE ISLAND.

TOY GUN.

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To all whom it may concern:

Be it known that I, ALBERT J. CHAREST, a citizen of the United States, residing at Woonsocket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in a Toy Gun, of which the following is a specification.

This invention relates to an improved toy gun wherein the primary feature is the use of a new and improved means for ejecting and shooting a projectile.

More particularly, I propose a gun embodying a stock, and a barrel composed of sections, the sections being spaced apart to permit operation of an impelling element which is connected with a flexible bow carried at the outer end of the barrel.

A particular feature of the invention is the specific construction of the barrel and the sections thereof wherein one section is provided with longitudinally spaced notches in which the flexible element or string of the bow is selectively seated and adapted to be engaged with the projectile to be projected.

Another feature of the invention is a means embodied in the barrel for holding the projectile normally therein when the gun is being carried from place to place, and until the user is ready to shoot.

A still further feature is the novel means employed for lifting the string of the bow from the notches and causing it to clear said notches, whereby to forcibly eject the projectile from the barrel.

Other features and advantages of the invention will become apparent from the following description and drawing.

In the accompanying drawing forming a part of this application and in which like numerals are employed to designate like parts throughout the same:—

Figure 1 is a side view of a gun construced in accordance with the present invention,

Fig. 2 is a top plan view of the same,

Fig. 3 is a perspective view, on an enlarged scale, of the lower half section of the barrel,

Fig. 4 is a fragmentary detail sectional view showing the barrel construction and the internal mechanism employed for holding the projectile and afterwards releasing it for flight.

Fig. 5 is a cross section taken approximately upon the plane of the line 5—5 of Fig. 1, on an enlarged scale.

Referring to the drawings in detail, the reference character 1 designates the stock, 2 indicates the barrel, and 3 the propelling or projecting means.

Considering the barrel first, it will be seen that this is made up of a top section 4 and a bottom section 5. The stock 1 is formed integral with the section 5. The construction of the section 5 is more plainly visible in Fig. 3. By referring to this figure it will be seen that the same is substantially rectangular in cross section, being of elongated form and being provided in its top face with a substantially semi-circular groove 6. One side is formed with a longitudinally elongated slot 7 and both sides are formed with opposed notches 8 and 9. Adjacent its point of connection with the top, it is formed with an opening 10 in which the trigger 11 is pivotally mounted.

By directing attention to Fig. 4, it will be seen that a release rod 12 is located in the slot 7 the same being connected at its opposite end with pivotally mounted cranks 13 and 14.

Considering now the upper half of the barrel, it will be seen that this is provided in that side opposed to the grooved face of the lower section with a channel 15. These two channels form a substantially cylindrical passageway for the projectile (not shown) which is adapted to be placed therein. By directing attention to Fig. 4, it will be seen that a retaining rod 16 is located in the channel 15 being pivoted at one end as at 17. The opposite end is connected to a pivotally mounted bell crank 18 which is acted upon by a suitably anchored coiled spring 19. At longitudinally spaced points upon the retainer rod 16 are arcuate plates 20 which are adapted to press against the upper side of the projectile to normally hold it in place. The spring 19 exerts a pressure in the direction to lock the bell crank in a manner to maintain the rod 16 in an inclined position after the clips 20 engage with the projectile. In this way the projectile is normally held against movement in the passageway and the gun may be carried from place to place without the projectile dropping out.

It will be noted from Fig. 4, that a link 21 constitutes a connection between the crank arm 14 and the bell crank 18. Considering now the impelling device 3, it will be seen that this comprises a flexible bow 22 provided with a string or its equivalent 23.

It is yet to be pointed out that this bow is mounted between the enlarged ends of the sections 4 and 5 in any suitable manner and that a face plate 24 is arranged here to connect the sections together. The sections are spaced apart to accommodate the string 23 as is obvious. Moreover, the bow and plate are both constructed to allow passage of the arrow or projectile therethrough and from the barrel.

In practice, the projectile is placed in the passageway formed between the sections 4 and 5 of the barrel 2. The trigger must be pressed in the manner to lift the retaining rod 16 to permit the placement of the projectile. Then the trigger is released and the spring acts upon the bell crank and rod to force the clips 20 against the projectile and to hold it in place until the operator wishes to shoot.

Obviously, by grasping the trigger and pulling in the usual way, the rod 16 will be moved in a manner to disengage the clips 20 from the projectile and at the same time the rod 12 will be lifted up to disengage the string from the notches 8 and 9. As the string is engaged with the projectile, the operation will simulate that of the ordinary bow and arrow and the projectile will be forcibly thrown or ejected from the barrel.

No doubt, by considering the description in connection with the drawings, persons familiar with devices of this kind will be able to obtain a clear understanding of the invention. Therefore, a more lengthy description is thought unnecessary.

Minor changes coming within the field of invention claimed may be resorted to if desired.

Having thus described my invention, what I claim as new is:—

1. A gun of the class described comprising a stock, a barrel connected thereto, said barrel being composed of spaced sections, a flexible bow at the outer end of said sections, a string carried by said bow and extending between said sections, one of said sections being formed with shoulders with which said string may be selectively engaged to flex said bow, and means associated with said barrel and shoulders for disengaging the string from the latter.

2. A gun of the class described comprising a barrel composed of spaced sections, one of which is provided with pairs of notches, a trip rod carried by said one section and cooperable with said notches, a trigger for operating said trip rod, a bow carried by said barrel, and a string connected to said bow and extending through the space between said sections, said string being adapted to be engaged with said shoulders and to be released from said shoulders by said rod.

3. In a gun of the class described, a barrel embodying spaced sections, one of which is provided with longitudinally spaced notches and with a release rod cooperable with said notches, a trigger mounted on said one section and cooperable with said rod, a retaining device carried by the other section and adapted to normally hold a projectile between said sections, said trigger being associated with said retaining device to render it ineffective when said rod is rendered effective, and a bow and string connected to said barrel.

4. In a gun of the class described, a barrel composed of spaced sections between which a cord is located, said sections having their opposed faces fashioned to accommodate a projectile, a release rod carried by one section, said one section being provided with notches with which said rod is cooperable, a retaining rod carried by the other section, a pivotally mounted bell crank, connections between said rod and said crank, spring means associated with said crank, and a trigger adapted to operate upon said crank.

In testimony whereof I affix my signature.

ALBERT JOSEPH CHAREST.