Dec. 4, 1945. E. O. BLANCHETTE 2,390,349

TOY FIREARM

Filed July 31, 1943 2 Sheets-Sheet 1

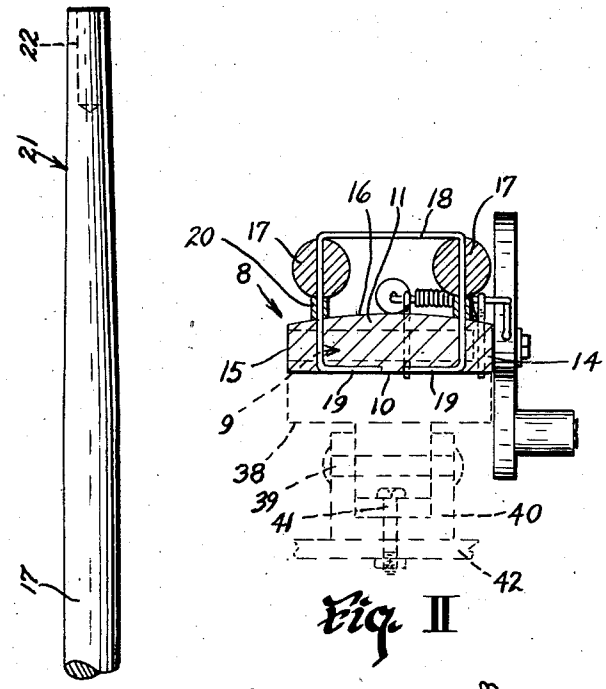


Fig. II

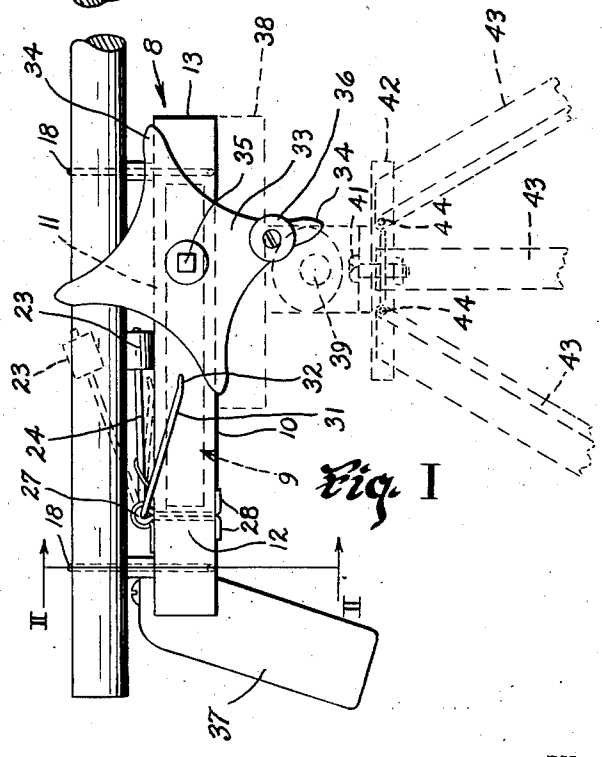


Fig. I

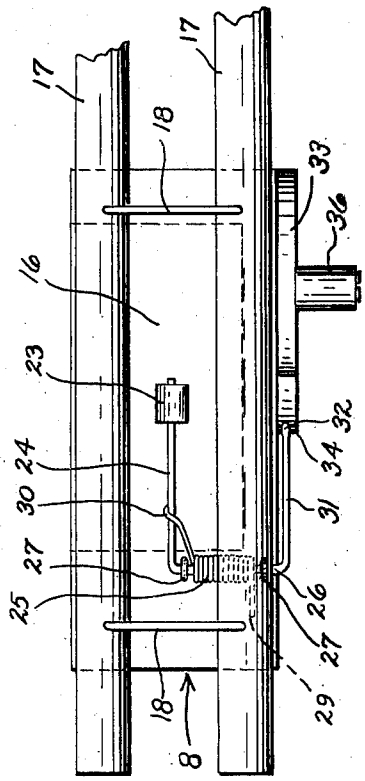


Fig. III

INVENTOR
Eli O. Blanchette
BY
Louis L. Gagnon
ATTORNEY

Dec. 4, 1945. E. O. BLANCHETTE 2,390,349

TOY FIREARM

Filed July 31, 1943 2 Sheets-Sheet 2

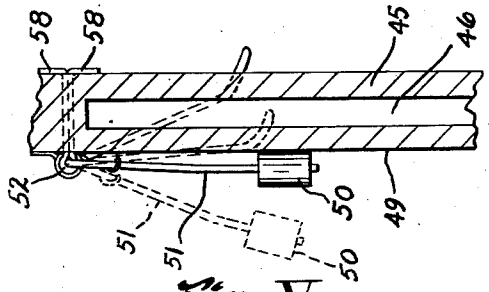


Fig. V

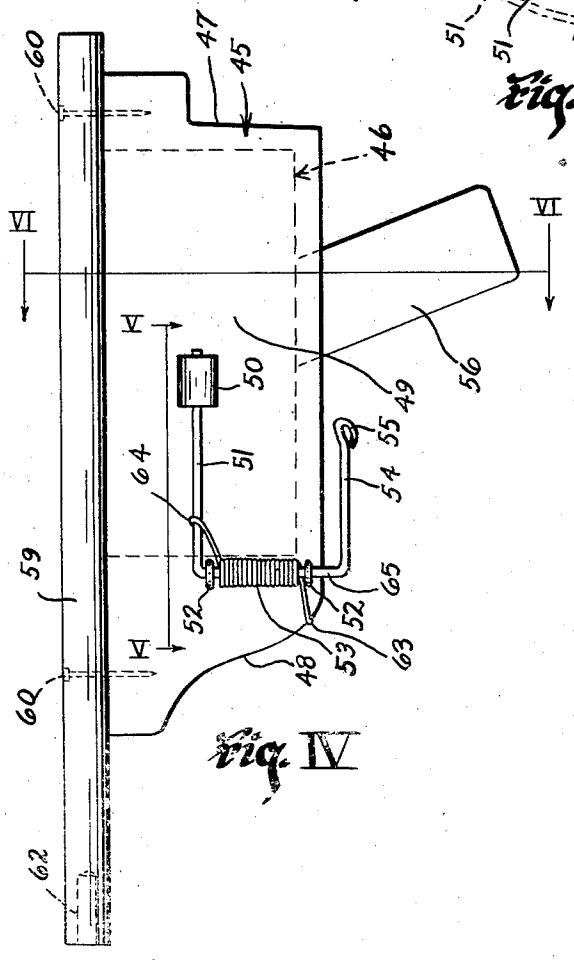


Fig. IV

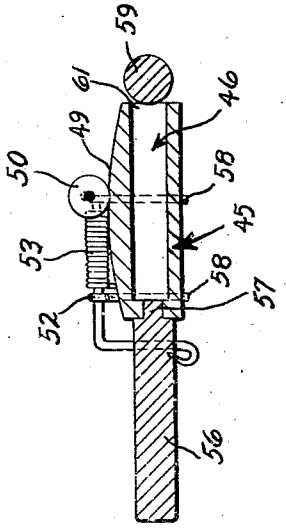


Fig. VI

INVENTOR
Eli O. Blanchette

BY
Louis A. Gagnon
ATTORNEY

Patented Dec. 4, 1945

2,390,349

UNITED STATES PATENT OFFICE

2,390,349

TOY FIREARM

Eli O. Blanchette, Killingly, Conn.

Application July 31, 1943, Serial No. 496,857

8 Claims. (Cl. 46—192)

This invention relates to improvements in toys and has particular reference to toy firearms and method of making the same.

One of the principal objects of the invention is to provide toy firearms and method of making the same which simulate actual firearms as to appearance and sound production and which will be extremely safe to use and inexpensive to manufacture.

Another object is to provide firearms of the above character with a tone chamber and a striking member for producing a sound effect simulating the sound of exploding shells and which may be manipulated in a manner simulating actual firearms.

Another object is to provide a part of the firearm structure with a tone chamber hollowed out from a unitary piece of material having a resilient manually operable striking member for producing a tone from said chamber and operable at will by the individual handling the firearm.

Another object is to provide a hollowed out tone chamber shaped to simulate a part of the firearm adapted to support the semblance of a gun barrel and a handle with the said member having the hollowed chamber having associated therewith a manually operable hammer member for producing a tone from said tone chamber simulating that of exploding shells and which may be operated at will.

Another object is to provide a simple and inexpensive construction of firearm of the above character.

Other objects and advantages of the invention will become apparent from the following description taken in connection with the accompanying drawings and it will be apparent that many changes may be made in the details of construction, arrangement of parts and methods shown and described without departing from the spirit of the invention as expressed in the accompanying claims. I, therefore, do not wish to be limited to the exact details of construction, arrangement of parts and methods shown and described as the preferred forms only have been given by way of illustration.

Referring to the drawings:

Fig. I is a side elevational view of one of the toy firearms embodying the invention;

Fig. II is a sectional view taken as on line 2—2 and looking in the direction indicated by the arrows;

Fig. III is a fragmentary plan view of the device illustrated in Fig. I;

Fig. IV is a side elevational view of a modified form of the invention;

Fig. V is a fragmentary sectional view taken as on line V—V of Fig. IV and looking in the direction indicated by the arrows; and

Fig. VI is a sectional view taken as on line VI—VI of Fig. IV and looking in the direction indicated by the arrows.

The invention is directed particularly to forming toy firearms simulating actual firearms as to appearance and sound production and which will be extremely safe to operate and which may be inexpensively fabricated.

Referring more particularly to the drawings wherein like characters of reference designate like parts throughout the several views the firearm embodying the invention, illustrated in Figs. I through III, is adapted to simulate a machine gun in appearance and operation and tone effect. This firearm comprises a main body portion 8 having a hollowed chamber 9 therein. The member 8 is preferably formed of wood or other material as a unitary piece of material having its central area hollowed out to produce integral upper and lower wall portions 10 and 11, integral end wall portions 12 and 13 and an integral side wall portion 14. The opposed side of the main body portion 8 has an opening 15 therein extending throughout the length of the hollowed out area. The upper wall 11 is provided with a convexly curved outer surface 16 extending throughout the length of the chamber 9 with the central portion thereof being thicker in cross-section than the longitudinal edges of said wall. The base block 8 has spaced barrel members 17 secured thereto by a bent wire 18 which is initially formed to a U-shape having its side branches extending through transverse openings in the barrel member 17 and through spaced openings formed in the main body portion 8. The protruding ends 19 are then bent to lie in the direction of the plane of the lower surface of the wall 10. This is best shown in Fig. III. Suitable spacer members 20 are positioned on the wire members between the barrel 17 and the upper surface 11 of the base block to support the barrels in proper spaced relation with said base block. Two connections of the character of the bent wire members 18 are used adjacent the opposed ends of the base block 8. This is best shown in Figs. I and III. The barrel members 17 are preferably formed of wood but may be formed of any other desirable inexpensive and non-essential material and may be of uniform diameter throughout their length or may

be turned down or molded as from plastic or other suitable material so as to have a tapered portion 21 adjacent the forward ends thereof to give the desired gun barrel effect. A suitable opening 22 may be formed in the forward end of the barrel as illustrated in Fig. I. In order to produce the sound effect desired a hammer member 23 carried by a bent wire 24 is urged toward the upper curved surface 16 by a coil spring or the like 25. The bent wire 24 has a portion 26 extending through the looped heads of spaced cotter pins or the like 27. The said cotter pins extend through spaced openings formed in the base block 8 and have their protruding ends 28 bent in a sidewise direction so as to lie in the direction of and in intimate relation with the lower wall 10 of the block.

The coil spring 25 has an end 29 engaging the upper surface 16 of the block and a hooked end 30 engaging the hammer wire 24. This normally urges the hammer member 23 into engagement with the upper surface 16 of the base block 8. The hammer wire 24 has a portion 31 extending outwardly of the angled portion 26 substantially in the direction of the main hammer wire portion 24 which is provided with an engagement end 32. A member 33 having a plurality of engagement members 34 for intermittently engaging the engagement end 32 is pivotally attached to the main body portion 8 as by a screw or the like 35. The said member 33 is provided with a handle 36 by means of which the said member 33 may be manually rotated. During the rotation of said member 33 the engagement members 34 intermittently engage the end 32 and respectively cause the hammer 23 to be raised, as shown by the dash lines in Fig. I, whereby continued rotary motion of the member 33 will cause said engagement end 32 to snap free from the respective engagement members 34 to permit the hammer 23 to be forced or snapped toward the wall 16 and strike a blow on said wall. The blow causing a sound to be emitted by the tone chamber simulating that of an exploding shell. The speed of rotation of the member 33 may be varied to produce the effect desired and to indicate the speed of firing of the gun. Although four engagement members 34 are shown on the member 33, it is to be understood that more or less of said engagement members may be used as desired. A relatively rapid speed of rotation of the member 33 causes the hammer 23 to strike relatively rapid successive blows on the tone chamber giving the effect of a rapidly fired machine gun.

The main body portion 8 having the tone chamber 9 therein may or may not be provided with a hand grip or the like 37 by means of which the said firearm may be supported.

If desired, the main body portion 8 may be attached to a base plate 38 by any suitable means, such as screws or the like not shown. The base plate 38 is pivoted, as illustrated at 39, to a U-shaped member 40 which is in turn pivoted, as illustrated at 41, to a carrier plate 42 of a tripod having adjustable foot members 43 respectively pivotally connected at 44 to the carrier plate 42. The axis of the pivots 39 and 41 are in substantially normal relation with each other whereby the gun barrels 17 may be tilted upwardly or downwardly and swung in a sidewise direction. The foot members 43 of the tripod may be adjusted for any desired height and the normally related pivot members 39 and 41 permit ease of manipulation of the gun member for purpose of aiming and for amply supporting the gun so that the desired firing effect may be obtained by rotation of the member 33 during the aiming of the gun by grasping the handle member 37. It is to be understood that the handle 36 is pivotally connected to the member 33 so that it may be firmly grasped during the rotation of the member 33.

In Figs. IV through VI, there is shown a modified form of the invention comprising a body portion 45 having a hollowed out portion 46 simulating the body 48 and tone chamber 9. The body portion 45 is formed of a unitary piece of material having its integral end walls 47 and 48 cut to a contour shape producing the shape effect desired for the main body portion of the gun. The member 47 may be formed of wood, plastic or any other desired material but is preferably formed to a unitary structure having a convexly curved side wall 49 simulating the wall 11 which is adapted to be engaged by a hammer member 50 simulating the hammer member 23.

The hammer member 50 is carried by a bent wire member 51 pivotally connected at 52 to the looped ends of cotter pins or the like. A suitable spring 53 simulating the spring 25 is adapted to normally urge the hammer member into engagement with the wall 49 to produce the desired sound effect. The end 54 which simulates the member 31 and having an engagement end portion 55 thereon is adapted to function as a trigger member which is to be engaged by a finger of the hand of the operator which is in grasped relation with a suitable handle or the like 56 carried by or secured to the body portion 45. The tone is produced by pressing the engagement member 55 an amount sufficient to force the hammer member away from the side wall 49 and by allowing the engagement end 55 to snap from the finger whereby the resilient means 53 will cause the hammer member to strike a blow on the side of the wall 49 and produce a sound from the tone chamber simulating the sound of an exploding shell. The handle member 56 is secured to the lower closed end of the body portion 45 by a reduced extension 57 fitting within an opening in said closed end wall and adhesively or otherwise secured thereto.

The cotter pins 52 have their protruding ends 58 bent in opposed sidewise directions simulating the ends 28 so as to lie in the direction of and in intimate relation with the adjacent wall of the tone chamber 46. A suitable barrel 59 is secured to the upper side of the body portion 45 by suitable nails, pins or the like 60. The said barrel 59 overlies the open end 61 of the body portion 45 and is secured in alignment with said body portion on the side thereof opposite the handle 56. This construction produces a firearm simulating a revolver and the firing tone is produced by depressing the engagement lever end 55 to cause the hammer 50 to move away from the side wall 49 as shown by the dash lines in Fig. V where upon releasing the finger from engagement with the end 55 will permit the spring 53 to snap the hammer into engagement with the side wall of the tone chamber and produce a sound simulating the sound of an exploding cartridge of a gun.

The end 62 of the barrel is perforated to produce the appearance of a hollow bore of a gun barrel. The spring 53 has an end 63 engaging the side wall of the body portion 45 and a hooked end 64 engaging the hammer wire 51 with the angled portion 65 of said wire extending through the coils of the spring 53 extending in a manner similar to that of the angled portion 26 of the device illustrated in Figs. I through III.

From the foregoing description it will be seen that simple, efficient and economical means have been provided for accomplishing all of the objects and advantages of the invention and although applicant has sought only two different constructions of fire arms, it is to be understood that several different constructions may be formed by utilizing parts of a similar nature.

Although the best tone effects are obtained by forming the hollow body portions 8 and 45 respectively from a unitary piece of material, it is to be understood that they may be formed of several different pieces secured together by suitable adhesive for sealing parts in integral relation with each other. In both of the constructions, the side walls 11 and 49 respectively which are to be engaged by the hammer members are preferably formed with an outer convexly curved surface whereby the central area of the respective walls are thicker than the longitudinal edge portions thereof.

Having described my invention, I claim:

1. A device of the character described comprising the combination of a hollow body portion forming a tone chamber, a barrel member connected with said body portion in aligned relation with the open end thereof, a hammer member pivotally connected with a side wall of said body portion, resilient means for urging said hammer member in engagement with said side wall, a hand grip on said body portion on the side thereof opposite the barrel member and an engagement member on said hammer member adapted to be engaged by a finger of a hand gripping the hand grip member for moving the hammer member in a direction away from the side wall of the body portion by pressure exerted on said engagement member and for permitting the resilient means to cause said hammer member to strike a blow on said side wall by releasing the pressure on said engagement member.

2. A device of the character described comprising the combination of a hollow body portion forming a tone chamber, a barrel member connected with said body portion in aligned relation with the open end thereof, a hammer member pivotally connected with a side wall of said body portion, resilient means for urging said hammer member in engagement with said side wall, a hand grip on said body portion on the side thereof opposite the barrel member and an engagement member on said hammer member adapted to be engaged by a finger of a hand gripping the hand grip member for moving the hammer member in a direction away from the side wall of the body portion by pressure exerted on said engagement member and for permitting the resilient means to cause said hammer member to strike a blow on said side wall by releasing the pressure on said engagement member, said side wall adapted to be engaged by the hammer member having an outer convexly curved surface.

3. A device of the character described comprising a body portion having a hollow chamber, a pair of spaced barrels secured to a side wall of said chamber in spaced relation with each other, a hammer member pivotally connected with said side wall and having a hammer portion located intermediate the barrel members, resilient means for urging said hammer member into engagement with said side wall, said hammer member having an engagement portion and a member pivotally connected with said body portion to one side of the barrel members having a plurality of engagement portions for engaging the engagement means of said hammer member for intermittently causing said hammer member to strike a blow on the side wall of said chamber.

4. A device of the character described comprising a main long and narrow hollow body portion formed of a unitary piece of non-metallic material having its inner major side walls in substantially parallel relation with each other, with one of said walls having a curved outer surface forming a thickened central portion, said body portion having a barrel member secured thereto in substantially parallel relation with a longitudinal wall thereof and a resiliently operated hammer member secured on the outer side of the side wall of the body portion having the curved outer surface and embodying means for manually manipulating said hammer member to cause said member to strike a blow on said side wall of the body portion.

5. In a device of the character described the combination of a hollow chamber having its inner major side walls in substantially parallel relation with each other, with one of said side walls embodying a centrally located part of increased thickness, a barrel member carried by said hollow chamber, with a portion thereof projecting outwardly of one end of said chamber, a U shaped member pivotally connected at the base to the side wall of the chamber embodying the part of increased thickness with one of the branches of the U shaped member having a hammer portion for engaging said part and the other an engagement portion for moving said hammer member away from the side wall of the chamber and resilient means carried by the base of the U shaped member for causing said hammer to resiliently strike a blow on said part of increased thickness when the engagement portion is manipulated.

6. A device of the character described comprising the combination of a main hollow body portion formed of unitary non-metallic material having its major inner side walls in substantially parallel relation, with one of said walls embodying a part of increased thickness, a barrel member secured to said hollow body portion by connection means extending through said barrel member and into the material of said body portion, a hammer member pivotally connected with the side wall of said body portion embodying the part of increased thickness, said hammer member constituting a wire bent to a U shape having its base pivotally connected with said side wall of the body portion and a weight carried by one of its branches for engaging said side wall, resilient means for urging the weight into engagement with the side wall of said body portion, a handle carried by said body portion and engagement means on the opposed branch of the U shaped member for causing said weight to move away from the side wall of the body portion when the engagement means is depressed and for striking the part of increased thickness a blow when pressure is released on said engagement means.

7. A device of the character described comprising the combination of a hollow body portion, a barrel member, means for connecting said barrel with and for supporting said barrel in spaced relation with said body portion, a lever pivotally connected directly with a side wall of said body portion and having a portion functioning as a hammer-like member for engaging said side wall and having an engagement portion and a manually operable member pivotally connected with said body portion and having means for intermittently engaging said engagement member and ar-

ranged to cause said hammer-like member to strike successive blows on said side wall.

8. A device of the character described comprising the combination of a hollow body portion having its inner major side walls in substantially parallel relation with each other, with one of said side walls embodying a centrally located part of increased thickness, a barrel member, means for connecting said barrel with and for supporting said barrel in spaced relation with said body portion, a lever pivotally connected directly with the side wall of said body portion having the part of increased thickness and having a portion functioning as a hammer-like member for engaging said side wall and having an engagement portion and a manually operable member pivotally connected with said body portion and having means for intermittently engaging said engagement member and arranged to cause said hammer-like member to strike successive blows on said side wall.

ELI O. BLANCHETTE.