Jan. 25, 1938. C. A. BRETHEN ET AL 2,106,400

TOY PISTOL

Filed April 4, 1936

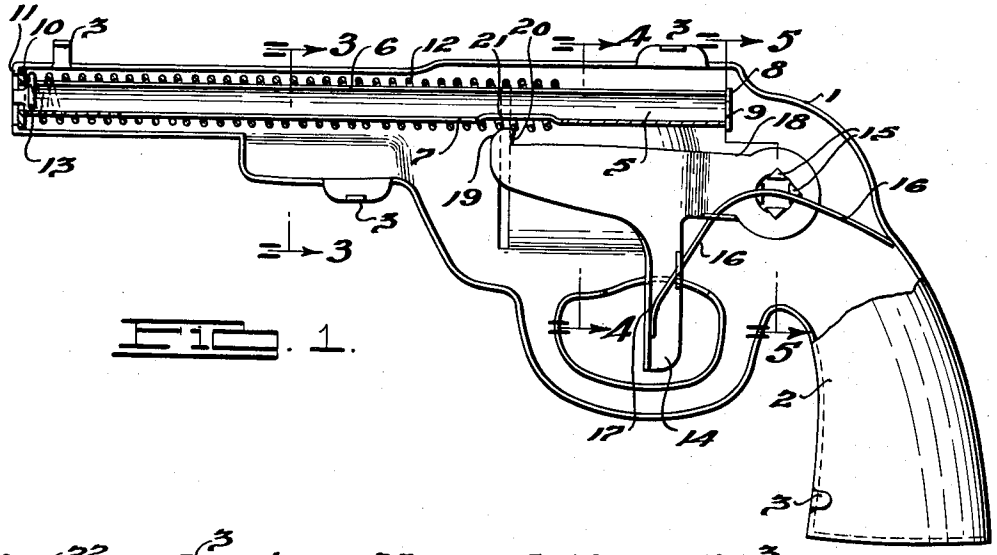


Fig. 1.

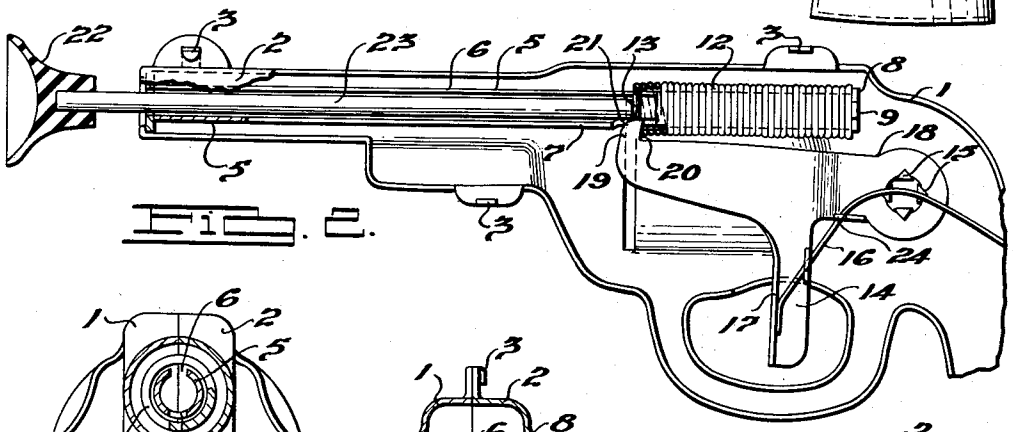


Fig. 2.

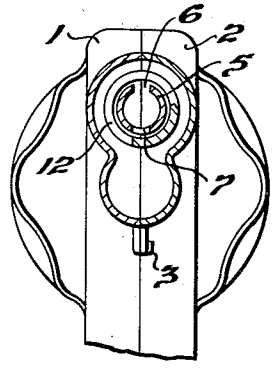


Fig. 3.

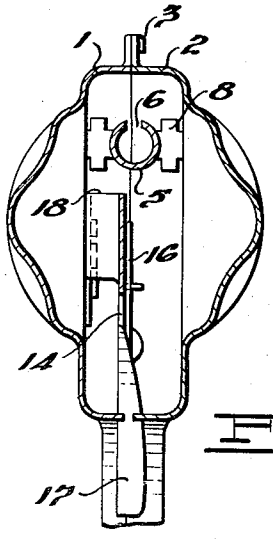


Fig. 4.

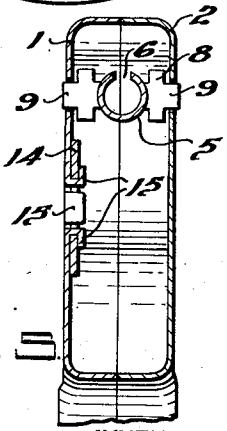


Fig. 5.

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TOY PISTOL

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Application April 4, 1936, Serial No. 72,724

2 Claims. (Cl. 124—27)

This invention relates to toy pistols and the object of the invention is to provide a toy pistol arranged particularly for shooting a dart.

Another object of the invention is to provide a toy pistol formed of sheet metal and having a tube provided with a longitudinal slot and a spring extending about the tube and having an inturned end extending through the slot and diametrically of the tube and arranged to be engaged by the shaft of the dart or projectile as it is inserted in the tube, the dart providing a means for manually compressing the spring and a trigger being provided arranged to engage over the end of the spring when compressed.

Another object of the invention is to provide a toy pistol composed of a minimum number of parts and arranged to shoot a projectile having a shaft fitting within the tube of the pistol.

A further object of the invention is to provide a means for rigidly securing the tube within the toy pistol when the sheet metal halves of the pistol are secured together, said means limiting movement of the spring on the tube.

These objects and the several novel features of the invention are hereinafter more fully described and claimed and the preferred form of construction by which these objects are attained is shown in the accompanying drawing in which—

Fig. 1 is a section through a toy pistol embodying our invention and showing the parts in the fired position.

Fig. 2 is a smilar view showing the parts in the cocked position with the projectile in the tube.

Fig. 3 is a section taken on line 3—3 of Fig. 1.

Fig. 4 is a section taken on line 4—4 of Fig. 1.

Fig. 5 is a section taken on line 5—5 of Fig. 1.

The pistol is composed of two sheet metal halves 1 and 2 shown in the several figures. These sheet metal halves are formed with inter-engaging lugs 3 for securing the parts together and the lugs on the top of the barrel are arranged to simulate sights. A tube 5 is provided in the toy pistol having a longitudinal slot 6 at the top and a slot 7 diametrically opposite as shown in Fig. 3 and a bracket 8 is secured to the rear end of the tube 5 and is provided with lugs 9 engaging in apertures therefor in the casing halves 1 and 2 as shown in Fig. 5 to secure the tube in position. At the forward end the tube is provided with a washer 10 secured thereto which fits against the inturned end 11 of the pistol halves and supports the forward end of the tube.

A coiled spring 12 is positioned about the tube 5 between the washer 11 and the bracket 9 and this coiled spring is provided with an inturned end 13 extending through the slot 6 and diametrically of the tube 5 as shown in Fig. 1. A trigger 14 is provided which is pivotally mounted on the inturned lugs 15 of the casing half 1 as shown in Fig. 5 and a spring wire 16 engages against the inside of the pistol at one end and at the opposite end engages beneath the flange 17 on the trigger 14 as shown in Fig. 1. The top edge 18 of this trigger 14 extends on a straight line and is provided with an upwardly extending lug 19 at the end forming an angular notch 20. The flat face 21 of this lug is wider than the space between the coils of the spring 12 when expanded and thus, in the position shown in Fig. 1, it is impossible for the spring wire 16 to rotate the trigger on the pivot 15 and move the lug 19 into the slot 7 in the bottom of the tube 5. Thus the spring wire 16 normally urges the flat face 21 of the lug 19 into contact with the coils of the spring 12.

The dart may be of any desired form and in the form here shown comprises a rubber suction cup 22 provided with a shaft 23 which may be of wood or any other desired material. When this shaft 23 is inserted in the end of the barrel shown in Fig. 1 it engages the inturned end 13 of the spring 12 and pushes this spring to the rear into engagement with the bracket 9 on the end of the tube 5. During this movement, the coils of the spring 12 ride over the face 21 of the lug 19 until the last coil of the spring passes this lug, at which time, the spring wire 16 turns the trigger to move the lug 21 into the slot 7. This engages the angular notch 20 over the last coil of the spring and locks the spring in the compressed position. At this time, by pulling on the trigger 14 the lug 19 is withdrawn from the slot 7 and the notch 20 is disengaged from the end coil of the spring thus releasing the spring and allowing it to expand and throw the dart out of the pistol by means of the inturned end 13 of the spring.

It will be noted from Figs. 1, 2 and 4 that the trigger 14 is provided with an outwardly extending lug or hook 24 behind which the trigger spring 16 is engaged. This retains the trigger spring in position in relation to the trigger and prevents it from snapping out of position when the trigger is operated.

From the foregoing description it becomes evident that the device is very simple and efficient in operation, is composed of sheet metal parts and is of low manufacturing cost and provides a device which accomplishes the objects described.

Having thus fully described our invention, its utility and mode of operation, what we claim and

desire to secure by Letters Patent of the United States is—

1. In a toy pistol, a sheet metal casing formed to simulate a pistol, a tube having integral out-turned lugs at one end and the casing being apertured to receive said out-turned lugs, the tube being provided with a longitudinal slot, a spring movable longitudinally of the tube and having an end extending through said slot, a trigger member pivotally mounted in the casing and having a hook end, the trigger member being provided with a flange, a pair of hook lugs extending from the trigger member in spaced relation with the flange, a spring wire engaging in the hook lugs and against the flange of the trigger member at one end and engaging the casing at the opposite end, the arrangement being such that the spring wire tends to turn the trigger on its pivot to maintain the hook end in contact with the coils of the spring, the spring being compressible against the out-turned lugs of the tube and the hook end of the trigger member being engageable over the end of the spring when so compressed.

2. In a toy pistol, a sheet metal casing formed to simulate a pistol, a tube having integral out-turned lugs at one end and the casing being apertured to receive said out-turned lugs and supporting the tube in spaced relation with the casing, the tube being provided with a longitudinal slot, a spring movable longitudinally of the tube and having an end extending through said slot, a sheet metal trigger pivotally mounted in the casing and having a hook end, the trigger being provided with a flange, a pair of hook lugs extending from the trigger in spaced relation with the flange and a spring wire engaging in the hook lugs and against the flange of the trigger at one end and engaging the casing at the opposite end, the arrangement being such that the spring wire tends to turn the trigger on its pivot to maintain the hook end in contact with the coils of the spring.

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