W. H. HERREN.

SAFETY GUN TRIGGER.

APPLICATION FILED JAN. 18, 1919.

1,360,950. Patented Nov. 30, 1920.

FIG. 1.

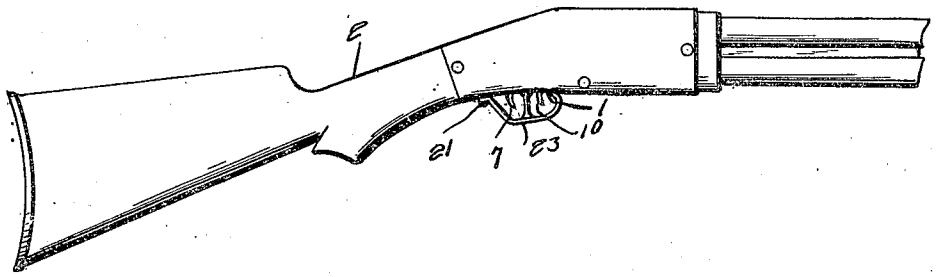


FIG. 2.

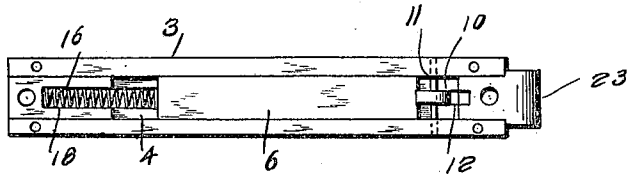


FIG. 3.

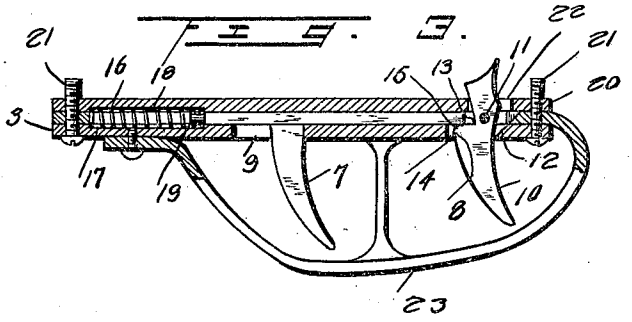
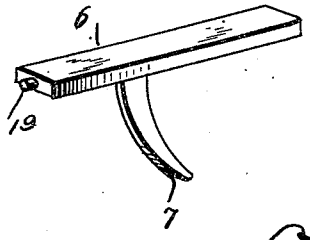


FIG. 4.



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SAFETY GUN-TRIGGER.

1,360,950. Specification of Letters Patent. Patented Nov. 30, 1920.

Application filed January 18, 1919. Serial No. 271,818.

To all whom it may concern:

Be it known that I, WILLARD H. HERREN, a citizen of the United States, residing at Heppner, in the county of Morrow and State of Oregon, have invented certain new and useful Improvements in Safety Gun-Triggers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to triggers for shotguns, rifles and other firearms, and the primary object of the invention is to provide an improved safety catch for the firing trigger, which will positively lock the same against movement and thereby eliminate the accidental discharge of the gun.

Another object of the invention is to provide an auxiliary trigger having means for engaging the firing trigger, so as to hold the same in locked position, which will be within convenient position for the operator of the gun, that can be operated to remove the means out of engagement with the firing trigger, without losing the aim of the object being fired at.

A further object of the invention is to provide a safety trigger in close proximity to the firing trigger having means for engaging the firing trigger to lock the same against movement, that can be operated simultaneously with the firing trigger, without taking the eyes off of the object being fired at, or operated at any time before the firing trigger is pulled.

A still further object of the invention is to provide an improved device of the above character, which is durable and efficient in use, one that is simple and easy to manufacture, and one that can be placed upon the market at a reasonable cost and placed upon and used in connection with the ordinary hammer or hammerless gun.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed and illustrated in the accompanying drawings, forming a part thereof, in which:

Figure 1 is a side elevation of the improved device applied to a gun.

Fig. 2 is a plan view of the improved device, showing the cover plate removed.

Fig. 3 is a longitudinal section through the improved device.

Fig. 4 is a detail view of the locking trigger.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the numeral 1 generally indicates the improved device which can be applied to any type of gun designated by the numeral 2.

The improved device 1 includes a base plate 3 having a longitudinally extending groove 4, which slidably receives a substantially flat rectangular slide plate 6 having formed integral therewith or secured thereto in any preferred manner a downwardly extending lock controlling trigger 7. The locking trigger 7 is carried by the lower surface of the slide plate 6 adjacent to the rear end thereof. The base plate 3 is provided with a pair of spaced slots 8 and 9, through which the firing trigger 10 and the locking trigger 7 extend, respectively. The slot 9 is of sufficient length so as to allow the locking trigger 10 to slide therein.

The firing trigger 10, which is of the ordinary construction, is held in place by means of a pivot pin 11 which extends through the walls of the groove. The forward wall of the slot 8 is preferably beveled, as at 12, so as to allow for the swinging movement of the firing trigger 10, when the same is operated. The rear face of the firing trigger 10 is provided with a notch 13, forming a shoulder 14 directly in alinement with and in rear of the pivot pin 11. The rear face of the shoulder 14 is preferably rounded as at 15, for a purpose which will hereinafter more fully appear.

The slide plate 6 is normally held in engagement with the shoulder 14, by means of expansion coil spring 16 which bears against the rear end of the slide plate. The lower surface of the wall of the groove 5 is recessed as at 17 for receiving the coil spring. The rear wall of the groove is provided with a slot 18 for receiving the rear end of the spring to prevent displacement of the same. The spring engages a rearwardly extending lug 19 formed on the slide plate 6 which eliminates movement between these parts.

A cover plate 20 is secured to the upper edge of the base plate by means of fastening elements 21 and completely incloses the working parts of the device. The cover plate 21 is provided with a slot 22, through which protrudes the upper end of the trig-

ger 10 for engaging the gun hammer or firing pin mechanism. A trigger guard 23 is secured to the base plate and if so desired an additional guard member may be positioned between the firing trigger 10 and the locking trigger 7, so as to form a compartment for each trigger.

In operation of the improved device, the locking trigger 7 is moved rearwardly which will slide the plate 6 rearwardly against tension of the coil spring and out of engagement with the shoulder 14, which will allow the firing trigger 10 to be operated in the ordinary manner. Owing to the curvature of the shoulder 14, the slide plate 6 returning to its normal position by the tension of the coil spring will tend to throw the firing trigger 10 to its normal position.

From the foregoing description it can be seen that an improved safety device is provided for the firing trigger, which will absolutely prevent the same from being accidentally pulled.

In practice, I have found that the form of my invention illustrated in the accompanying drawings and referred to in the above description, as the preferred embodiment, is the most efficient and practical; yet realizing the conditions concurrent with the adoption of my device will necessarily vary, I desire to emphasize that various minor changes in details of construction, proportion and arrangement of parts may be resorted to, when required, without sacrificing any of the advantages of my invention as set forth.

What I claim is:

1. A safety gun trigger comprising a supporting plate having a longitudinally extending groove and spaced slots in communication therewith, a firing pin actuating trigger pivoted to said plate and extending through one of the slots, a shoulder formed on said trigger and having a rounded end, a locking plate slidable in said groove, a trigger formed on said locking plate and extending through the other slot and parallel with the firing pin actuating trigger, a block secured in one end of the groove and having a spring seat, a spring engaging said seat and bearing against the locking plate to cause the same to normally slide over the shoulder, and a cover plate secured to the supporting plate and closing the groove thereof and overlying the locking plate.

2. A safety gun trigger comprising a supporting plate having a groove extending its full length and spaced slots in communication therewith, a trigger pivoted in said plate and extending through one of the slots, a shoulder formed on said trigger, a locking plate slidable in said groove, a block secured in one end of the groove for closing said end of the groove and having a spring seat, a spring engaging the seat and locking plate for forcing said locking plate over the shoulder, a trigger on said locking plate and extending through the other slot, a guard having one end secured to the supporting plate and located in the other end of the groove for closing said end of the groove and having its other end secured to the under face of the supporting plate, and a cover plate secured to the supporting plate and overlying the locking plate and having a slot to receive the first named trigger.

In testimony whereof I affix my signature in presence of two witnesses.

WILLARD H. HERREN.

Witnesses:
ERVIN M. SHUTT,
JOHN L. CALLAWAY.