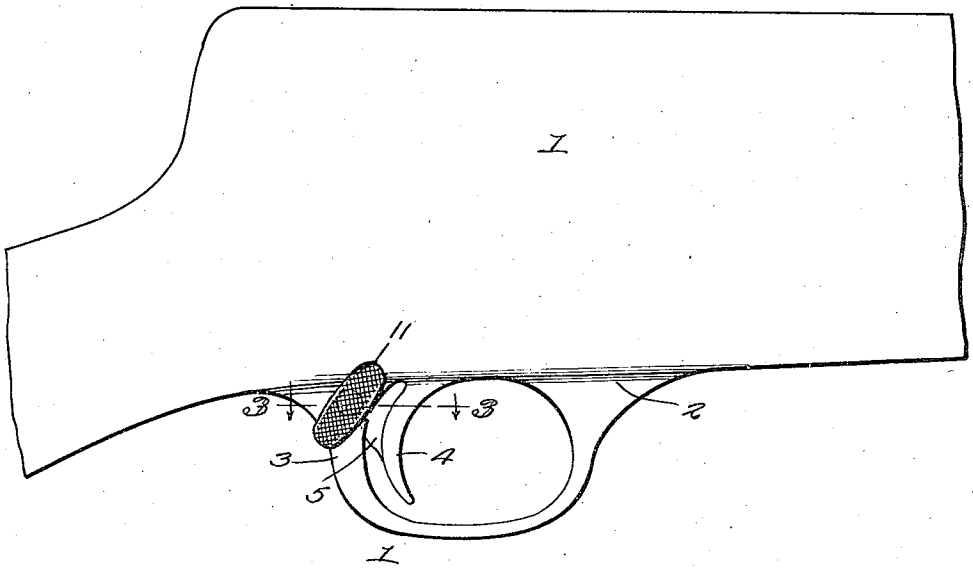
Jan. 11, 1949. T. L. MAYNOR 2,458,616

TRIGGER SAFETY FOR SHOTGUNS AND THE LIKE

Filed June 13, 1945

Fig. 1.



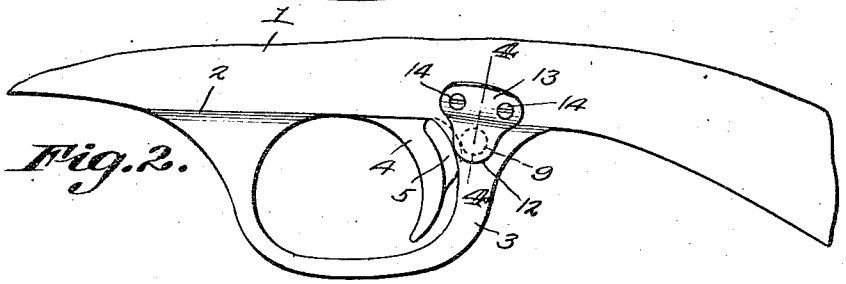
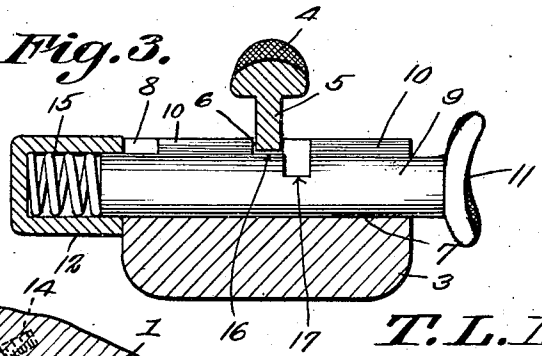


Fig. 2.

Fig. 3.



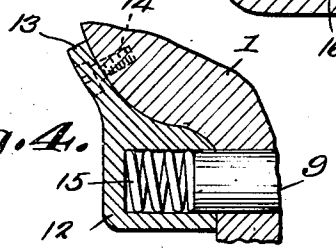


Fig. 4.

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TRIGGER SAFETY FOR SHOTGUNS AND THE LIKE

Tracy L. Maynor, Beckley, W. Va.

Application June 13, 1945, Serial No. 599,138

1 Claim. (Cl. 42—70)

1

This invention relates to safety pins for shotguns and other firearms of a similar type, one of the objects being to provide a safety pin of the cross-bolt type which will act automatically to hold the trigger against accidental retraction, the position and construction of this cross-bolt "safety" being such that it can be actuated by the same finger in contact with the trigger to be be pulled so that a slight transverse pressure exerted prior to or during the pull on the trigger will release said trigger for retraction.

Another object is to provide a locking pin which, when released, will automatically return to its initial position, thereby again locking the trigger against retraction until such time as the hand of the user shall be placed in position to pull the trigger whereupon said trigger can be unlocked and actuated without thought or effort.

A further object is to provide a locking pin which normally prevents unintentional actuation of the trigger.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in certain novel details of construction and certain steps in the method hereinafter more fully described and pointed out in the claims, it being understood that changes may be made without departing from the spirit of the invention as claimed.

In the acompanying drawing the preferred form of the invention has been shown.

In said drawing,

Figure 1 is a side elevation of a portion of a firearm equipped with the present improvements.

Figure 2 is an elevation of a portion of a firearm viewed from the opposite ends.

Figure 3 is an enlarged section on the line 3—3, Fig. 1.

Figure 4 is an enlarged section through one side portion of the firearm taken on the line 4—4, Fig. 2.

Referring to the figures by characters of reference 1 designates a portion of the firearm to which is secured the usual trigger plate 2 having a trigger guard 3. The trigger 4 is mounted in the usual manner and is provided with the conventional lug or blade 5 extending backwardly therefrom into a slot 6 within the rear portion of the guard.

Formed within the rear portion of the guard is a transverse bore 7 provided with a keyway 8 that extends longitudinally of the bore and slot 6 is at right angles to and opens into this bore.

A cross-bolt or safety pin 9 is slidably mounted in the bore 7 and has a key 10 within keyway 8

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whereby the cross-bolt or safety pin is held against rotation. One end of this cross-bolt or pin is enlarged to provide a finger rest 11 normally supported beyond that side of the trigger guard to be engaged by the finger actuating the trigger. If the trigger is to be operated by a finger on the right hand of the user the rest 11 will project from the right side of the trigger guard. Obviously, however, this cross-bolt or safety pin can be reversed in the bore 7 so that the finger rest 11 will be supported beyond the left side of the trigger guard, thereby adapting it for use by a person using the left hand when firing the gun.

A cap 12 houses that end of the cross-bolt or pin 9 remote from the finger rest 11 and can be secured in place on the guard 3 in any suitable manner. For example, and as shown in Fig. 4, the cap 12 can have an integral wing 13 held to the side of the gun by one or more screws 14 or the like. The cap contains a coiled spring 15 which exerts a constant pressure against the bolt or pin 9, thereby holding the cross bolt in one extreme position, with finger rest 11 normally spaced from the side of the guard.

The key 10 is cut away where is crosses the slot 6 to provide a seat 16 normally positioned across the inner edge of the lug or blade 5, as shown in Fig. 3, so that retraction of the trigger 4 is thus prevented. The engagement of the trigger blade with one end wall of the cutaway part (see Fig. 3) provides a stop limiting movement of the cross-bolt beyond the above-mentioned extreme or normal position. However, at one end of and communicating with the seat 16 there is formed a recess 17 which extends into the bolt or pin so that when bolt or pin 9 is shifted against the action of spring 15, this recess 17 is brought into register with the blade or lug 5 so that it then becomes possible to retract the trigger. Exact registry of the recess with the trigger results when the trigger engages the other end wall of the cutaway portion, which other end wall is flush with the recess wall (see Fig. 3).

In using a gun equipped with the present improvements a finger is applied to the trigger in the usual manner but, in order to reach the trigger, the finger must be extended across the finger rest 11. By using the finger to thrust against rest 11, the safety is released and said finger can then be used to retract the trigger and fire the gun. As soon as the finger is removed from the trigger and the rest 11 disengaged from the finger, the bolt or pin 9 will snap back into normal position so as to bring the seat 16 behind lug or blade 5. This

results in relocking the trigger against retraction.

Importance is attached to the fact that the structure described enables the user to fire the gun without thought or effort in releasing the safety, and the further fact that the trigger is automatically locked without trusting to the memory of the user to relock it.

It is a fact well known to hunters that many shots at game have been lost through failure to release the safety in time, where the usual locks are employed. With the present structure, however, the locking and unlocking are practically automatic and quick shots can be made without thought of effecting a release.

What is claimed is:

In a firearm, the combination, with a trigger guard having a transverse bore, a keyway extending longitudinally of and communicating with the bore, and a slot at right angles to and opening into the bore and keyway, and with a trigger movably mounted in the slot, of a cross-bolt slidable in the bore, a key on the cross-bolt slidable in the keyway to prevent rotation of the cross-bolt, a spring engaging and yieldably urging the cross bolt in one direction to one extreme position, a finger rest on one end of the cross-bolt positioned relative to the trigger to receive thrust from a user's finger approximately simultaneously with depression of the trigger by said finger, for movement of the cross-bolt in the other direction to an opposite extreme position against the action of the spring, the key having a cutaway portion

to provide a seat receiving and preventing depression of the trigger when the cross-bolt is in the first-named position, the trigger when positioned in the seat engaging one end wall of the cutaway portion to provide a stop for preventing movement of the cross-bolt beyond the first-named extreme position, and said cross-bolt having a recess immediately adjacent and communicating with the seat to receive the trigger when the cross-bolt is moved to its second extreme position, to permit depression of the trigger, one end wall of the recess being flush with the other end wall of the cutaway portion to provide a stop engageable by the trigger to prevent movement of the cross-bolt beyond its second extreme position and to register the recess with the trigger as the trigger is depressed.

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