Nov. 30, 1943. W. D. HANSON 2,335,669

SAFETY DEVICE FOR GUNS

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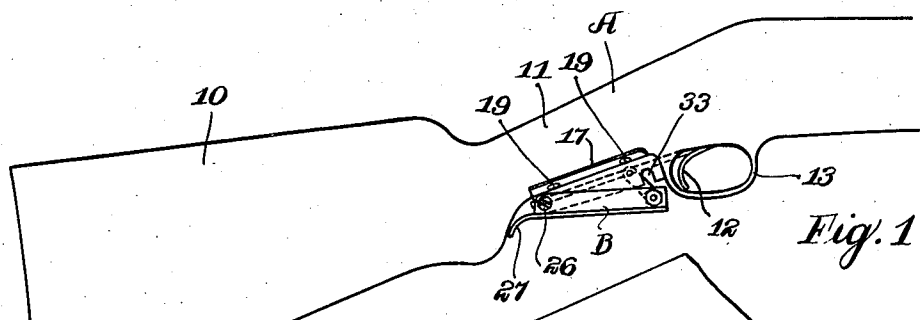


Fig. 1

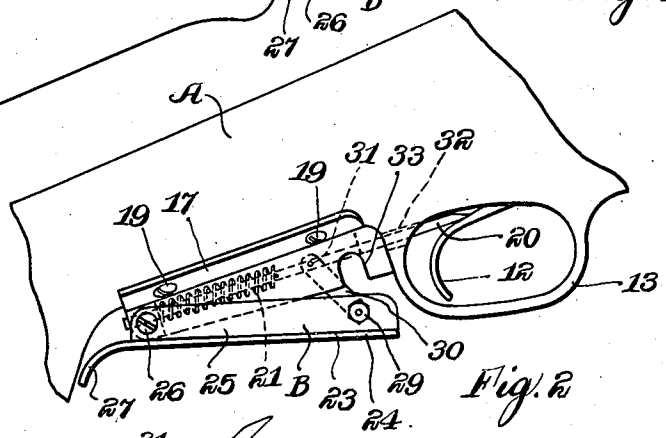


Fig. 2

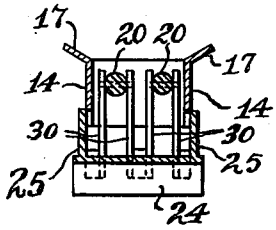


Fig. 7

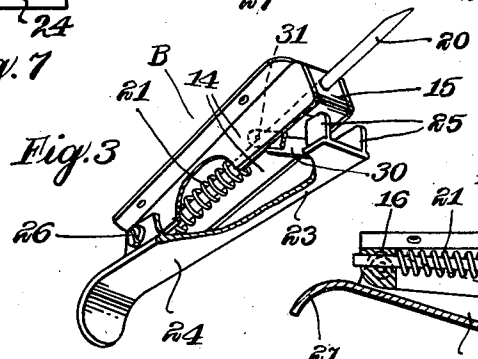


Fig. 3

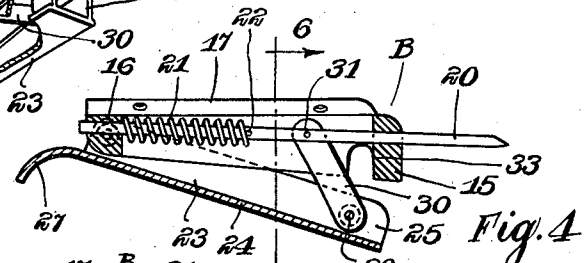


Fig. 4

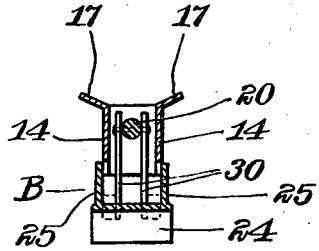


Fig. 6

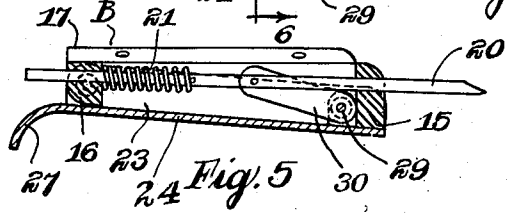


Fig. 5

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SAFETY DEVICE FOR GUNS

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5 Claims. (Cl. 42—70)

My invention relates to an improvement in safety devices for guns wherein it is desired to provide a device which will prevent the accidental discharge of the fire arms.

Various types of safety devices have been previously constructed to accomplish much the same purpose. Most of these safety devices are locked near the trigger of the gun and must be actuated prior to operating the trigger of the gun. Because of the time required in operating this safety device, it is oftentimes disengaged during the time the user is hunting with the gun. In other words, before travelling through a group of trees or a like spot where game might be seen, the hunter will disengage the safety catch of the gun. If the hunter should trip or fall, or if the trigger should be accidentally engaged during the time the safety catch is off, the gun will be accidentally fired. A great number of accidents have resulted from such previous constructions, and it is therefore desirable to provide a safety device which will not require separate actuation before the gun is fired.

The object of the present invention is to provide a safety device which engages the trigger of the gun or the mechanism of the gun adjacent the trigger and which may be separated by merely compressing the portion of the gun adjacent the trigger at the time the trigger is pulled. In order to fire the gun the grip of the gun must be engaged. If the grip is provided with a yieldable means, this yieldable means is compressed at the time the grip is engaged, thus without making any false movements or without the necessity of performing any motion which is not ordinarily necessary in the shooting of a fire arm, the safety catch may be disengaged.

It is a purpose of the present invention to provide a safety catch which will operate so easily and so readily that there is no necessity of withdrawing the safety catch before it is necessary to fire the gun. With my apparatus mounted on the grip of the gun it is only necessary to grip the gun in the usual manner in order to apply the safety catch. Thus the gun may be operated simply and quickly.

A further feature of my invention lies in the fact that the safety catch is held in safety position by resilient means which can not be locked out of operation. Thus as soon as the gun is released the safety catch is applied and the gun can not be operated. In order to hold the gun in such a manner that the safety catch will not be applied, it is necessary to engage the grip of the gun, which is not the normal way of carrying the gun. Furthermore, the normal tendency for the safety to be applied makes it necessary to maintain a tight grip on the gun in order to keep the safety device out of safety position. Accordingly the gun can not well be carried with the safety device out of its proper position.

These and other objects and novel features of my invention will be more clearly and fully set forth in the following specification and claims.

In the drawing forming a part of my specification:

Figure 1 is a side elevation view of the stock and grip portions of a gun, showing the safety device applied thereto.

Figure 2 is an elevation view of the grip portion of the gun in enlarged form.

Figure 3 is a perspective view of the safety device removed from the gun, a portion of the device being broken away in order to show the construction thereof.

Figure 4 is a longitudinal section through the safety device illustrated in Figures 1, 2, and 3.

Figure 5 is a sectional view similar to Figure 4, but showing the safety device in retracted position.

Figure 6 is a sectional view of the safety device illustrated in Figure 4, the position of the section being indicated by the line 6—6 of Figure 4.

Figure 7 is a sectional view similar to Figure 6 showing the safety device applied to a double barrelled gun.

The gun A is of any desirable type and may be of a single barreled or double barreled type of gun. The gun itself includes a stock 10, a grip portion 11, and a front portion which is broken away in Figure 1 of the drawing. A trigger 12 is provided which is protected by a trigger guard 13. The trigger and trigger guard may be of any desired or usual shape.

The safety device B includes a pair of spaced parallel sides 14 which are connected at the forward end by a bearing block 15 and which are connected at the opposite end by a bearing block 16. Flanges 17 are provided on the opposite sides 14 by means of which the sides 14 may be secured to the grip portion 11 of the gun A by any suitable means, such as the screws 19.

A safety plunger 20 is slidably secured in the bearing blocks 15 and 16 and is urged in one direction by a spring 21. The spring 21 extends between the bearing block 16 and a pin 22 on the safety plunger 20.

A channel 23 is provided with a channel base

24 and opposite sides 25 which are designed to embrace the sides 14. A pair of aligned pivots 26 extend through the channel sides 25 and engage into the bearing block 16. One end 27 of the channel base 24 is curved as illustrated in the drawing to lie closely adjacent the grip portion 11 of the gun A and to prevent the fingers of the operator from sliding off the channel 23.

The sides 25 of the channel 23 are pivotally connected at 29 to links 30. The other ends of the links 30 are pivoted at 31 to the safety plunger 20. As the channel 23 is engaged by the fingers of the operator this channel swings upwardly pivoting the links 30 in a counter-clockwise direction and sliding the safety plunger 20 out of engagement with the trigger 12. As soon as pressure is relieved upon the channel 23 the spring 21 urges the plunger 20 outwardly into engagement with the trigger 12. Because of the fact that the links 30 are almost aligned with the plunger 20 only a limited retraction may be provided. The end of the plunger 20 engages directly between the trigger 12 and the body of the gun and acts to effectively prevent accidental firing of the gun. The plunger 20 extends through an aperture 32 in the guard 13 to engage a trigger 12.

In place of the single plunger 20 a pair of parallel plungers could be substituted for the forward end of the plunger 20 in order to engage both triggers of a two barreled gun, as shown in Figure 7 of the drawing. Thus, if it is desired, the present construction may be readily applied to a doubled barrel gun as well as a single barreled type.

The notch 33 is formed in the sides 14 in order to permit the maximum pivoting of the channel 23 without making the device bulky. The links 30 are preferably arranged in pairs on opposite sides of the plunger 20 so as to equalize the strain.

In accordance with the patent statutes I have described the principles of construction and operation of my safety device for guns, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A safety device for guns having a trigger and a trigger guard, the device comprising a pair of spaced sides adapted to extend longitudinally of said gun adjacent said trigger guard, bearings secured at each end of said sides, a safety plunger mounted for slidable movement in said bearings, said plunger adapted to extend through said trigger guard and being engageable with said trigger, lever means pivoted to said sides, and link means pivotally secured to said lever means and to said safety plunger.

2. A safety device for a gun having a trigger and a trigger guard, the device comprising a pair of spaced parallel sides adapted to extend rearwardly from said trigger guard, bearing means connecting said sides, a plunger slidably secured in said bearing means and adapted to engage said trigger, a channel member pivotally secured to said sides, and link means connecting one end of said channel member to said plunger.

3. A safety device for a gun having a trigger and trigger guard, the device comprising a pair of spaced sides on said gun adapted to extend rearwardly from said trigger guard, bearing means connecting said sides, a plunger slidably mounted in said bearing means and adapted to engage said trigger, spring means between said sides urging said plunger in one direction, channel means pivoted to said sides, the base of said channel means closing the space between said sides, and means connecting said channel means to said plunger for operating said plunger by said channel means.

4. A safety device for guns having a trigger and a trigger guard, the device comprising a pair of spaced sides adapted to extend rearwardly from said trigger guard, attaching flanges on said sides, spaced bearings connecting said sides, a plunger slidable in said bearings and adapted to engage with said trigger, a spring encircling said plunger and secured at one end thereto, the other end of said spring engaging one of said bearings, a closure pivoted to said sides, and link means connected at one end to said closure, and at the other end to said plunger for sliding said plunger in a manner to compress said spring.

5. A safety device for guns having a trigger and a trigger guard, the device comprising a pair of spaced sides adapted to extend longitudinally of said gun adjacent said trigger guard, bearing means connecting said sides, a plunger longitudinally slidable through said bearings and adapted to engage said trigger, spring means connecting said plunger to one of said bearings to urge said plunger in one direction, a lever pivoted to said sides, means connecting said lever at a point thereof spaced from the pivotal connection with said sides to said plunger, and notch means in said sides to accommodate the pivotal connection between said lever and said connecting means.

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