Dec. 1, 1959 T. H. WILLENBACHER 2,914,877

TRIGGER SAFETY DEVICE FOR FIREARMS

Filed April 7, 1958

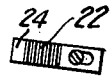


FIG. 2

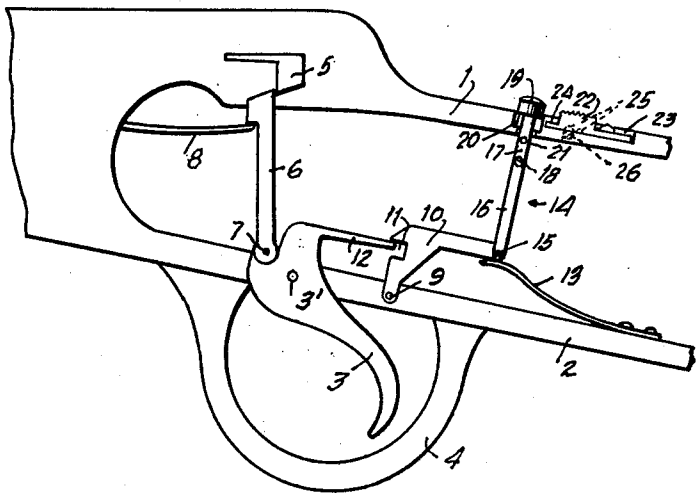


FIG. 1

INVENTOR
Thomas H. Willenbacher
by Arthur d Smith
ATTORNIES

United States Patent Office

2,914,877

Patented Dec. 1, 1959

2,914,877

TRIGGER SAFETY DEVICE FOR FIREARMS

Thomas H. Willenbacher, East Worcester, N.Y.

Application April 7, 1958, Serial No. 726,735

2 Claims. (Cl. 42—70)

My invention relates to firearms and particularly to a safety device therefor.

The principal object of my invention is to provide a safety device for a firearm of the type which is fired from the shoulder and which is always on except when the firearm is in a position to be fired. Another object is to provide a device of this character having means adapted to cooperate therewith which will prevent the safety from being moved to the off position even when the firearm is in a position to be fired.

I accomplish these and other objects by the means described below and illustrated in the accompanying drawing, in which—

Fig. 1 is a more or less diagrammatic view of the trigger of a firearm and my safety device cooperating therewith. There are other parts of the firearm but I have shown only those parts which properly illustrate how my invention functions; and

Fig. 2 is a top plan view of the portion of Fig. 1 immediately below it.

Referring to the drawing, 1 and 2 are the upper and lower tangs, respectively. 3 is the trigger which is pivoted at 3', and 4 is the trigger guard. 5 is the firing pin connector, 6 is a bar which is pivotally connected to the trigger at 7 and which serves to release the firing pin when the trigger is pulled. 8 is a spring which, in cooperation with the bar 6, pulls the trigger forward after the fire arm has been fired. Pivotally connected to the lower tang at 9 or to some other portion of the fire arm is a safety catch 10 which is provided with a notch 11 therein and which cooperates with the rearwardly extending portion 12 of the trigger to prevent its being pulled back to fire while the part 12 is in the notch 11. 13 is a spring which cooperates with the catch 10. 14 indicates generally the safety release means which is pivotally connected at 15 to the catch 10. The safety release 14 comprises a lower section 16 and an upper section 17 which are pivotally connected together at 18. The portion 17 extends through the upper tang and is provided with a safety button 19 at the top thereof which may be pushed down against the spring 13 into the socket 20. In order to have the button properly aligned with the recess 20 the lower edge of the button is always within the recess. In order to prevent the spring 13 from forcing the rod 14 upwardly so that the bottom of the button 19 is outside of the recess 20 I provide a pin 21 in the upper portion 17 of the rod which prevents the rod from being forced upwardly beyond the point where the pin contacts the bottoms of the upper tang. Slidably mounted in recess 23 in the upper tang, just to the rear of the recess 20, is a second safety device 22. The front end of the device 22 is provided with a portion 24 which can be slid under the button 19 so that the button cannot be pressed downwardly. The bottom of the device 22 is provided with two semi-spherical recesses 25 therein, and a small spring 26 having a ball on the top thereof which is adapted to fit in either of the recesses 25 in the bottom of the safety device 22 is disposed in a cylindrical recess in the tang.

While I have illustrated my invention as attached to a firearm having upper and lower tangs, it can be attached to guns that are not provided with such tangs. The important feature is to have the trigger release button so located so that the thumb of the shooter will automatically overlie it and depress it when he is about to shoot. In other words, the button is in the hand grip of the firearm. It is understood that it is to be centrally disposed so that the thumb of either a right-handed or a left-hand shooter will automatically overlie it.

What I claim is:

1. In a firearm of the type that is fired from the shoulder; a trigger having a rearwardly extending portion at the top thereof; a safety catch pivotally mounted below said portion and having a notch therein in which the end of said portion is receivable; a spring cooperating with said catch and biased to urge said catch into a position where the end of said portion of said trigger lies in said notch and prevents said trigger from being pulled; a safety release means comprising an upstanding rod formed of a lower and an upper section which are pivotally connected together in substantially aligned relation and the lower section of which is pivotally connected to said catch; said upper section of said rod being provided at the top thereof with a button having the lower portion thereof seated in a socket in the hand grip of said firearm where the thumb of the trigger pulling hand of the shooter will automatically overlie and depress said button and release said catch when the shooter brings the firearm into shooting position.

2. In a firearm of the type that is fired from the shoulder; a trigger having a rearwardly extending portion at the top thereof; a safety catch pivotally mounted below said portion and having a notch therein in which the end of said portion is receivable; a spring cooperating with said catch and biased to urge said catch into a position where the end of said portion of said trigger lies in said notch and prevents said trigger from being pulled; a safety release means comprising an upstanding rod formed of a lower and an upper section which are pivotally connected together in substantially aligned relation and the lower section of which is pivotally connected to said catch; said upper section of said rod being provided at the top thereof with a button having the lower portion thereof seated in a socket in the hand grip of said firearm where the thumb of the trigger pulling hand of the shooter will automatically overlie and depress said button and release said catch when the shooter brings the firearm into shooting position; and means for locking said safety device comprising an element slidably mounted in said hand grip adjacent said button and movable into a position beneath said button to prevent downward movement of said button.

References Cited in the file of this patent

UNITED STATES PATENTS

338,189	Potter	Mar. 16, 1886
465,764	Jenkins	Dec. 22, 1891
1,230,973	Yeaton	June 26, 1917
1,239,920	Larson	Sept. 11, 1917
2,380,140	Anderson	July 10, 1945

FOREIGN PATENTS

3,789	Great Britain	1893
3,274	Great Britain	1895