

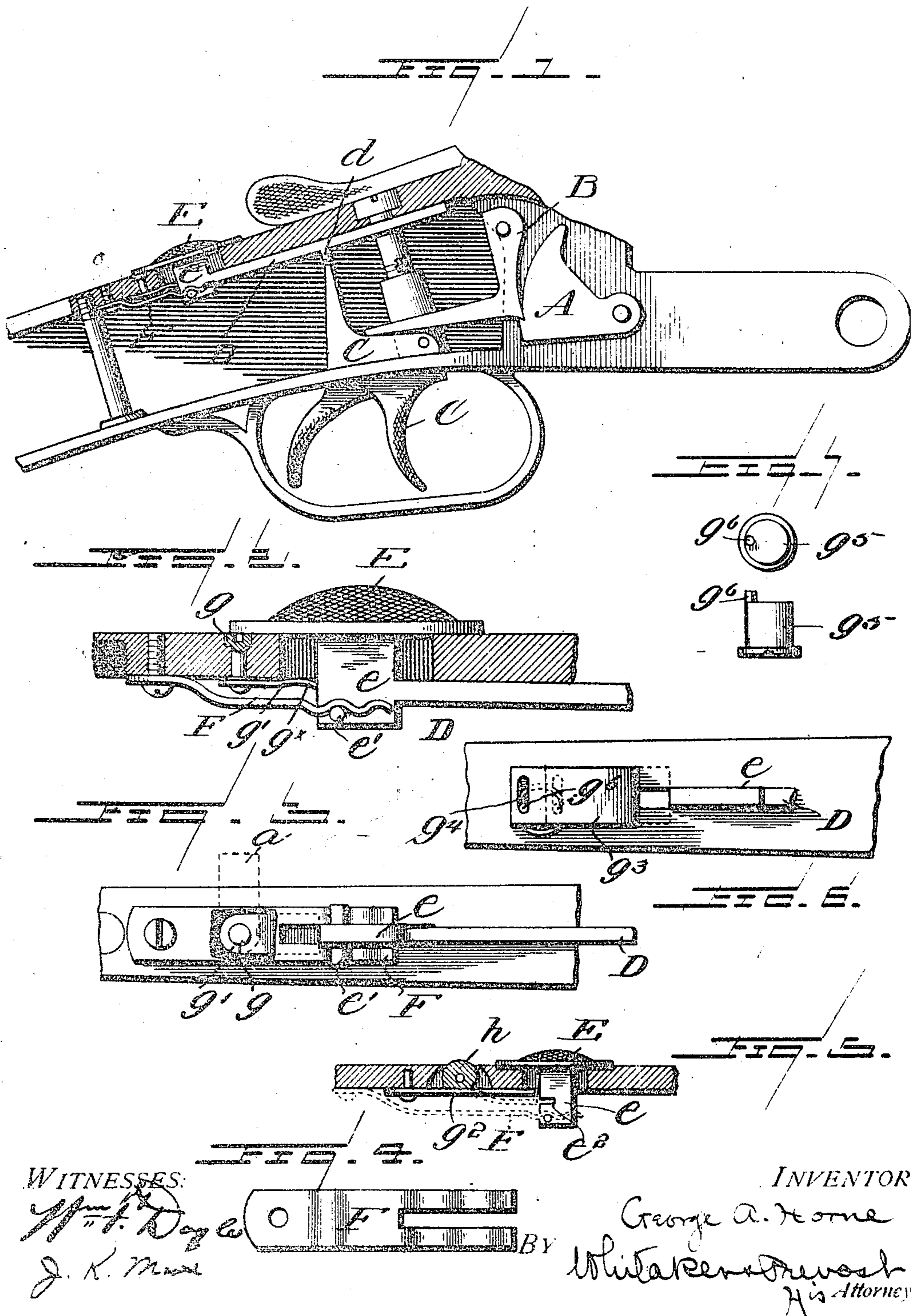
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G. A. HORNE.
SAFETY DEVICE FOR FIREARMS.

APPLICATION FILED MAY 11, 1903.

NO MODEL.



WITNESSES:

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SAFETY DEVICE FOR FIREARMS.

SPECIFICATION forming part of Letters Patent No. 754,564, dated March 15, 1904.

Application filed May 11, 1903. Serial No. 156,667. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. HORNE, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Safety Devices for Firearms; 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.

My present invention relates to firearms, and more especially to the safety devices for preventing the accidental or premature discharge of the firearms to which they are attached.

In the accompanying drawings I have illustrated several ways in which I have contemplated embodying my invention, and my said invention is fully disclosed in the following description and claims.

In the drawings, Figure 1 is a sectional view of so much of a firearm or fowling-piece as is necessary to illustrate my invention. Fig. 2 is a sectional detail on an enlarged scale. Fig. 3 is an under side view of the parts shown in Fig. 2. Fig. 4 is a separate view of one of the parts. Fig. 5 is a view of a modification, and Figs. 6 and 7 are views of a further modification.

In breech-loading firearms it has long been the practice to provide the gun with a safety-slide that has a part which in certain positions engages the triggers and prevents the releasing of the sear and the discharge of the gun. This slide is so connected with some of the parts of the gun that are actuated in the operation of opening and closing the gun to load the same that when the gun has been loaded and closed the gun is held safe from premature discharge. When the gun is to be fired, the slide is moved by a thumb-piece out of the safe position. It is usual in cases such as described to have a part connected with the slide elastically seated in a notch when in either the "safe" or "firing" positions. There are also guns having this safety device in which the slide or its equivalent may be moved to a third position, in which the safety device is wholly inoperative and the

gun can be used as an ordinary gun not provided with these devices. These two forms of safety devices are in common use and are termed "two-notch" safety and "three-notch" safety guns. Every manufacturer has to manufacture guns of both constructions, as many purchasers insist on having one form of safety device and will not purchase the other, while others are equally positive in respect to the form of safety device discarded by the other class.

My invention is a construction which is both a three-notch safety or a two-notch safety and may be changed from one to the other at will.

In the drawings, A is the hammer, B the sear, and C the trigger, of a hammerless breech-loading gun.

D is the safety-slide, which is so connected as to be moved into the safe position by the operation of loading the gun. E is the thumb-piece by which this slide may be moved by hand. This thumb-piece is as commonly used in this class of devices upon the outside of the stock and is connected to the slide D by the shank *e*. The shank *e* is in this instance provided with a pin *e'*, which engages the notches on the under side of the spring-retaining device or retainer F. This retainer is slotted and passes on each side of the shank *e*, the pin *e'* extending outward on each side of the shank *e* and engaging both portions of the slotted or bifurcated retainer.

In Figs. 1, 2, 3, and 4 a short pin or bolt *g*, provided with a head having a screw-cut or gain, is inserted in the tang of the gun in rear of the slot in which the shank *e* moves backward and forward. To the lower end of this bolt *g* is rigidly secured the plate *g'*. This plate is preferably given a slight upward bend at *g^x* to give a certain amount of friction against the under side of the tang. The bolt *g* can be turned by inserting a screw-driver in the cut or gain in the head of the same and the plate *g'* turned to the position shown in Figs. 1 and 2, in which case the safety device is a two-notch safety, or the plate *g'* may be turned to the position shown in dotted lines at *a* in Fig. 3, in which case the safety device is a three-notch safety.

Another and modified construction is shown in Fig. 5. In this figure a spring-plate g^2 is secured to the under side of the tang above the slotted retaining-plate. A revolving thumb-piece h is pivoted in the tang above the plate g^2 . The upper side of this thumb-piece is preferably milled or roughened and extends slightly above the upper surface of the tang, so as to be capable of being moved by the hand. The lower side of this rolling thumb-piece is provided with two plane faces for engaging with the spring-plate g^2 . These faces are at different distances from the pivot or center of the thumb-piece, so that when one of these faces is in engagement with the spring-plate g^2 the latter will assume the position shown in dotted lines in Fig. 5. The shank e , connected with the slide D, is provided with a notch e^2 , registering with the spring-plate g^2 in its lower position. When the revolving thumb-piece h is turned so as to depress the spring-plate g^2 , so as to bring the free end of the said plate in line with the notch e^2 , the safety-slide can be moved backward to the inoperative position, and the safety device becomes a three-notch safety. If the revolving thumb-piece be so turned as to bring the other plane face against the spring-plate, the said plate will rise and occupy the position shown in full lines in Fig. 5, and the slide D cannot be moved backward to the inoperative position, and the device becomes a two-notch safety.

In Figs. 6 and 7 is shown another modification. In this construction there is employed a plate g^3 , which is guided so that it can be moved backward and forward in a straight line by any suitable means, preferably by the walls of the recess in which it is placed. This plate is provided with the transverse slot g^4 . A bolt g^5 is pivotally mounted in the tang. This bolt has its head or upper end provided with a screw-cut or gain and has its lower end provided with the crank-pin g^6 to enter the slot of the plate g^3 . By inserting a screw-driver in the cut or gain on the head of the bolt it can be turned so as to move the plate g^3 into the position shown in full and dotted lines in Fig. 6 and make the device a two-notch safety, and by turning it so as to bring the plate g^3 into the position shown in the same figure in full lines the slide can be moved backward to the inoperative position and the device made a three-notch safety.

In the constructions here shown the slide D is provided with the projection d , which when the slide is in the safe position is in alinement with a projection on the trigger; but I do not wish to be limited by such construction, as any other form of construction by which the slide D may prevent the firing of the gun when the slide is in safe position may be employed. In cases of double-barreled

guns the projection d or its equivalent will be made to engage both triggers and hold both the barrels in safety.

By this improvement each gun is provided with the same safety appliance, and the gun is made a "three" or "two" notch safety, as the purchaser or user may desire.

What I claim, and desire to secure by Letters Patent, is—

1. A three-position safety device having combined therewith a device movable into position to form a stop for holding the said safety device from being moved to inoperative position thereby changing it to a two-position safety, substantially as described.

2. A safety device for breech-loading firearms, comprising a safety-slide, movable to three positions and a device movable into the path of said slide to form a continuously-acting stop to prevent said slide from being moved into inoperative position, whereby the device is changed to a two-position safety, substantially as described.

3. A safety appliance for firearms, comprising among its members, a safety device movable from a firing position to a position to prevent the unintentional discharge of the arm, and movable also to an inoperative position and a device movable into and out of operative relation with said safety device for preventing the safety device from being moved into inoperative position, substantially as described.

4. A safety appliance for firearms movable into firing, safe and inoperative positions, of a rotating part and a plate operatively related thereto whereby said plate can be moved into position to prevent the safety device from being moved into the inoperative position, substantially as described.

5. A safety appliance for firearms, comprising the slide movable into firing, safe and inoperative positions, a bolt rotatably mounted in the tang of the gun, and a plate operatively connected therewith whereby said plate can be moved into position to form a continuously-acting stop to prevent the said slide from being moved into inoperative position, substantially as described.

6. A safety appliance for firearms comprising the slide movable into firing, safe, and inoperative positions, a bolt rotatably mounted in the tang of the gun, a plate secured to said bolt and frictionally engaging the under side of the tang to hold the slide from being moved into inoperative position, substantially as described.

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

GEORGE A. HORNE.

Witnesses:

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MABEL M. FRENCH.