

R. C. EVANS.
SAFETY DEVICE FOR HAMMERLESS GUNS.
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Fig. 1

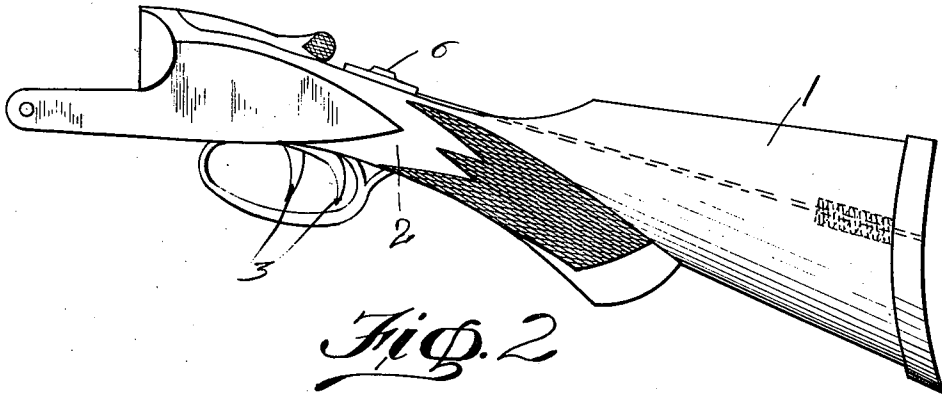


Fig. 2

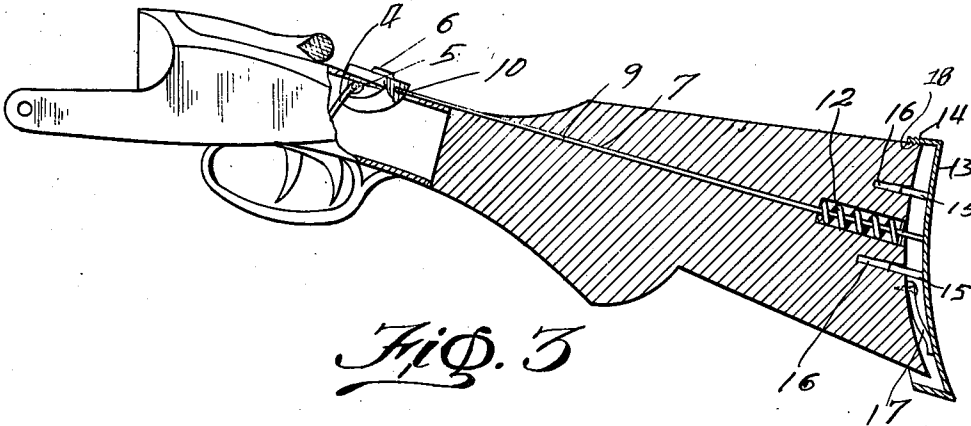
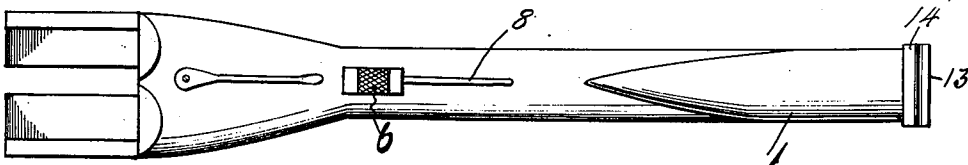
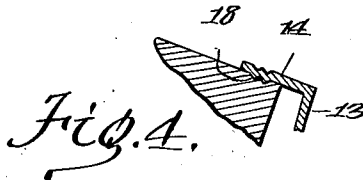


Fig. 3



Witnesses
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UNITED STATES PATENT OFFICE.

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SAFETY DEVICE FOR HAMMERLESS GUNS.

1,305,346.

Specification of Letters Patent.

Patented June 3, 1919.

Application filed May 9, 1917. Serial No. 167,582.

To all whom it may concern:

Be it known that I, RAY C. EVANS, a citizen of the United States, residing at North River, in the county of Rockingham, State of Virginia, have invented certain new and useful Improvements in Safety Devices for Hammerless Guns; 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.

The object of the invention is to construct a safety lock for hammerless guns, which is automatically released by the action of pressing the gun stock against the shoulder preparatory to firing the gun. More particularly the invention, consists in providing a very simple device whose action will be positive, both to release and reset the safety catch before and after firing respectively.

With the above objects in view, and such others as may hereinafter appear, my invention will now be fully set forth and described, reference being had to the accompanying drawings.

In the drawings:—

Figure 1 is a side elevation of the stock and grip of a hammerless gun,

Fig. 2 is a longitudinal section through this structure, and,

Fig. 3 is a plan view thereof.

Fig. 4 is an enlarged detail sectional view showing the interengaging teeth of the stock and butt plate for holding the butt plate against movement toward the stock when its upper end rests on the ground in the normal inclined resting position of the gun.

Referring more particularly to the drawings, 1 indicates the usual gun stock and 2 the hand grip of a shot gun, the latter, upon its under side having projected therefrom the triggers 3 which may be locked by means of the pivoted locking finger 4. The finger 4 is pivoted between a pair of lugs 5 which are carried by the top of the lock casing. Also mounted within the lock casing, and projecting through a slot therein is the usual thumb piece 6, the latter being connected to the finger 4 so that as the thumb piece is rocked the latter will be carried into or out of engagement with the trigger mechanism to lock or release the same.

The present invention is adapted for use with a gun and safety device of such conventional nature, and to embody the inven-

tion therein, there is formed lengthwise through the stock, from the butt thereof to the connection of the front end of the stock with the hand grip, a tubular bore 7, the latter being continued in a groove 8 entered into the top of the hand grip and terminating at its front end behind the thumb piece 6. The bore and groove provide a housing for a push rod 9, the front end of the latter being provided with a threaded end 10 which is socketed in the thumb piece. At its rear end the bore 7 is enlarged to receive a coil spring 12, one end of which bears against the forward end of the enlargement while the opposite end thereof is connected to the push rod so as to normally force the latter rearwardly so that the thumb piece 6 is rocked to throw the locking finger into locking engagement with the locking mechanism. The extreme end of the push rod is connected to a plate 13 which is of such size and shape as to coincide with the butt of the stock and is flanged to closely or slidably overlie the edges of the butt. When the push rod is projected into its normal position by the spring 12, the plate 13 is spaced from the butt. In addition to the flange 14, the plate carries upon its inner face a pair of pins 15 which slidably engage the recesses 16 carried into the stock, so that while the plate is yieldably supported, it also provides a properly firm substitute for the usual butt plate, both for the sake of appearance and substantial construction.

The device is used, of course, to release the safety lock from the triggers in an automatic fashion by the pressure of the butt of the gun against the shoulder in the act of aiming and firing. As the plate is crowded between the stock against the action of the spring 12 the push rod rocks the thumb piece 6 which in turn releases the locking finger 4 so that the triggers are free to be operated. Instantaneously, with the release of the pressure of the shoulder against the plate, however, the spring 12 returns the latter to its normal position thereby resetting the locking device. The automatic device according to my construction does not disfigure the gun, when it is placed in the stock contour and has no projections which may be caught on the clothes, or brush or tall grass. On the other hand, the butt plate 13 completely hides the butt, and the flange 14 conceals the spaces between the plate and stock so that it is not apparent that the gun

is provided with a safety device of this character without close inspection.

In order to prevent the safety device from being released when the butt of the gun is placed upon the ground, I have located at the side of the center toward the lower end of the butt the leaf spring 17, which, exerting a pressure against the inner face of the butt plate throws the latter outwardly so that its upper end is rocked into engagement with the upper corner of the stock, the stock and the flange of the butt plate 14, being corrugated at that point forming teeth 18 in interfitting relation so that they are mounted together under normal conditions. However, when the butt is pressed against the shoulder, so that the pressure is directed entirely along the stock, and there is no force exerted transversely of the stock, as is the case when the butt is rested on the ground at its upper corner, the corrugations will override one another so that the action of the safety device is unrestricted.

What I claim as my invention is:—

1. The combination with a gun including a stock and a safety lock carried by the breech casing, a rod connected with the safety lock and slidable through the stock, a butt plate connected with the rear end of the rod and resiliently urged outward, a

flange around the edge of said plate slidably receiving the gun butt, and coacting teeth on one end portion of the flange and the adjacent corner portion of the gun butt, to hold the gun butt and butt plate against relative movement upon application of oblique pressure to the adjacent end of the plate.

2. The combination with a gun including a stock and a safety lock carried by the breech casing, a rod connected with the safety lock and slidable through the stock, a butt plate connected with the rear end of the rod and resiliently urged outward, a flange around the edge of said plate slidably receiving the gun butt, coacting teeth on one end portion of the flange and the adjacent corner portion of the gun butt, to hold the gun butt and butt plate against relative movement upon application of oblique pressure to the adjacent end of the plate, and a spring disposed between the gun butt and the other end of the butt plate.

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

RAY C. EVANS.

Witnesses:

D. E. CRANSHORN,
J. E. WERNER.