W. F. NEARY.

SAFETY DEVICE FOR FIREARMS.

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1,098,048.

Patented May 26, 1914.

Fig. 1

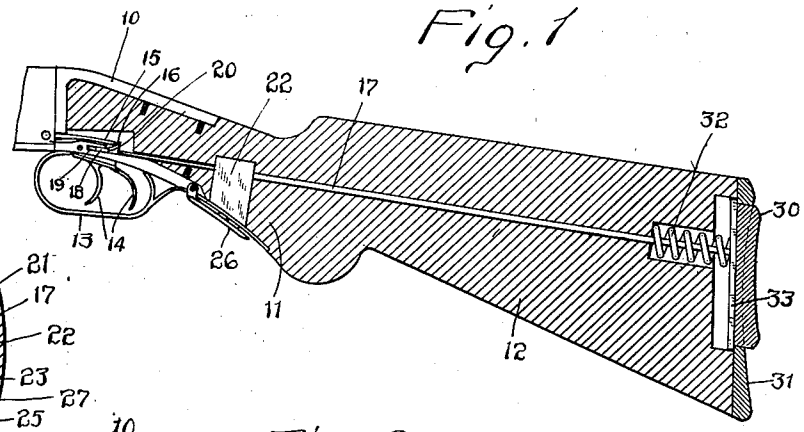


Fig. 3

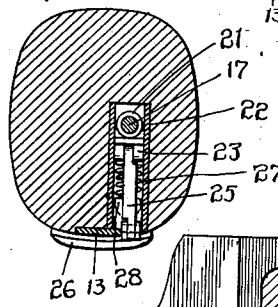


Fig. 2

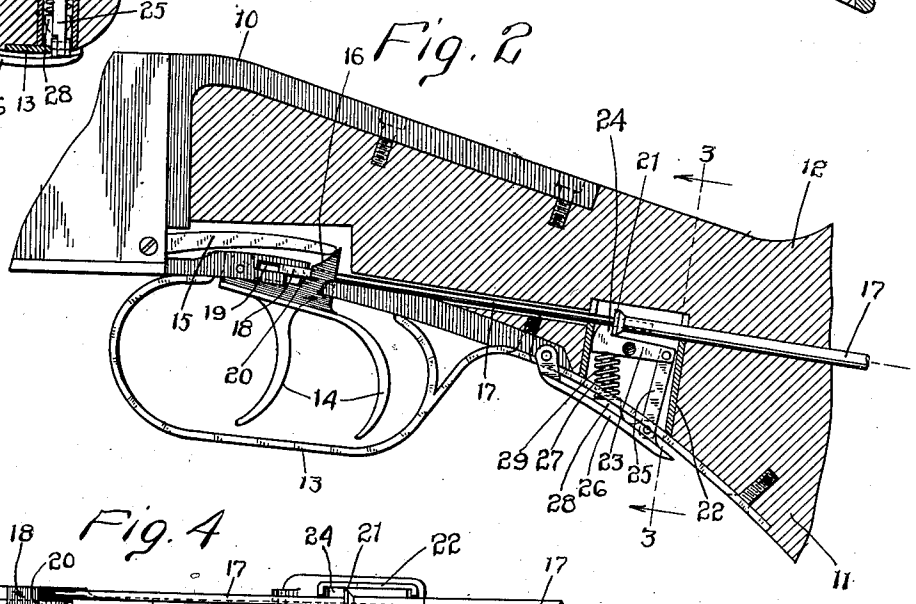
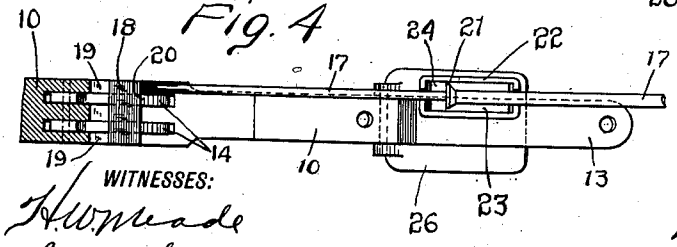


Fig. 4



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SAFETY DEVICE FOR FIREARMS.

1,098,048. Specification of Letters Patent. Patented May 26, 1914.

Application filed October 23, 1913. Serial No. 796,839.

To all whom it may concern:

Be it known that I, WILLIAM F. NEARY, a citizen of the United States, residing at Milford, county of New Haven, State of Connecticut, have invented an Improvement in Safety Devices for Firearms, of which the following is a specification.

This invention has for its object to provide a safety device adapted to shoulder firing guns and rifles generally, which will provide a double lock against the firing of a cocked gun by intentional or unintentional operation of the trigger until both locks have been operated.

With this and other objects in view I have devised the novel safety device which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts.

I have illustrated the invention as applied to a double barrel shot gun. It will of course be understood, however, that the invention is not limited in application to any special type of fire arm.

Figure 1 is a longitudinal section of the grip and stock of a firearm illustrating the application thereto of my novel safety device. Fig. 2 a similar view on an enlarged scale, a portion of the frame being broken away and the housing in section; Fig. 3 a transverse section on the line 3—3 in Fig. 2, looking in the direction of the arrows, and Fig. 4 is a plan view corresponding with Fig. 2, the grip and the upper portion of the frame being removed.

10 denotes the frame of a firearm, 11 the grip, 12 the stock, 13 the guard, 14 triggers and 15 a firing lever. The hammers and action are omitted as it is sufficient for the purposes of this specification to state that the firing lever or levers are actuated by the trigger or triggers to cause operation of the firing mechanism. For convenience in description I will use the singular form. The trigger is provided with a head having a cam surface indicated by 16, which is engaged by the firing lever and actuates the latter when the trigger is pulled.

My invention consists broadly in providing two independent locks which prevent the trigger from being pulled, one of these locks being operated by the natural pressure of the hand upon the grip and the other by the natural pressure of the butt of the stock against the shoulder in the act of sighting.

17 denotes a rod which extends longitudinally of the grip and stock. At the forward end of this rod is a locking plate 18 which lies in front of the cam surface on the trigger and prevents operation of the trigger until the plate has been moved forward. The frame is shown as provided with a slot 19 in which the plate slides and the head of the trigger is preferably provided with a notch 20 which normally receives the plate. When the plate is in engagement with this notch, operation of the trigger is impossible.

21 denotes a shoulder or stop on the rod which lies within a housing 22 recessed in the grip of the arm. A lever 23 pivoted within the housing is provided with a head 24 which engages the stop. A link 25 connects the lever with a releasing plate 26, which is pivoted to the frame forward of the housing and covers the housing. The releasing plate is normally retained at a slight distance from the grip, as shown in Fig. 2, and the head of the lever is retained in locking engagement with the stop by means of the spring 27 which bears against the lever and against a boss 28 on the releasing plate. A pin 29 extending from the lever lies within the spring and holds it against displacement. At the rear end of the rod is a bearing plate 30 which is socketed in the butt plate 31 and in the stock and is held normally projecting beyond the butt plate by means of a spring 32 socketed in the stock. The outer face of the bearing plate is preferably curved to correspond with the curvature of the butt plate. A plate 33 socketed in the stock and secured to the bearing plate and slightly longer than the bearing plate limits the outward movement of the bearing plate.

The operation is as follows: The normal or locking position of the parts is shown in the drawing. It will be obvious that the trigger is locked by plate 18 carried by the rod and that the rod is locked by the engagement of the head on lever 23 with the stop on the rod. The rod cannot be moved forward by pressure upon the bearing plate to release the trigger until the rod has been released by pressure upon the releasing plate. In handling a firearm in the usual way in the act of firing, the operator seizes the grip with one hand and presses the butt against his shoulder. In seizing the grip the operator naturally presses the releasing plate inward, which tilts the lever against the power of spring 27 and disengage the head

on the lever from the stop on the rod, thus releasing one of the locks upon the trigger. The pressure of the butt of the firearm against the shoulder then moves the bearing plate inward against the power of spring 32 and carries the rod forward, which moves the locking plate forward and disengages it from the notch in the head of the trigger. The trigger may then be pulled in the usual manner to actuate the firing lever.

Having thus described my invention I claim:

1. A device of the character described comprising a trigger locking plate, a rod by which said plate is carried, a stop on said rod, means for actuating the rod, a lever having a head normally engaging the stop, a releasing plate, a link connecting the lever with the releasing plate and a spring acting on both lever and releasing plate.

2. In a device of the character described, locking means for gun-firing mechanism, a reciprocatory rod to operate said locking means, means to move the rod forwardly, a stop carried by the rod, a lever pivoted between its ends and provided at one end with a head to normally engage the stop, a spring to move the pivoted lever in one direction, a pivoted releasing plate, and a link pivotally connecting the releasing plate with the opposite end of the pivoted lever.

3. In a device of the character described, locking means for gun firing mechanism, a reciprocatory rod to operate the locking means, means to move the rod forwardly, a stop carried by the rod, a lever pivoted between its ends and provided at one end with a head to normally engage the stop, a releasing plate pivoted at one end, a link pivotally connecting the opposite end of the plate with the corresponding end of the pivoted lever, and a spring engaging the plate between its ends to force the same outwardly.

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

WILLIAM F. NEARY.

Witnesses:
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