

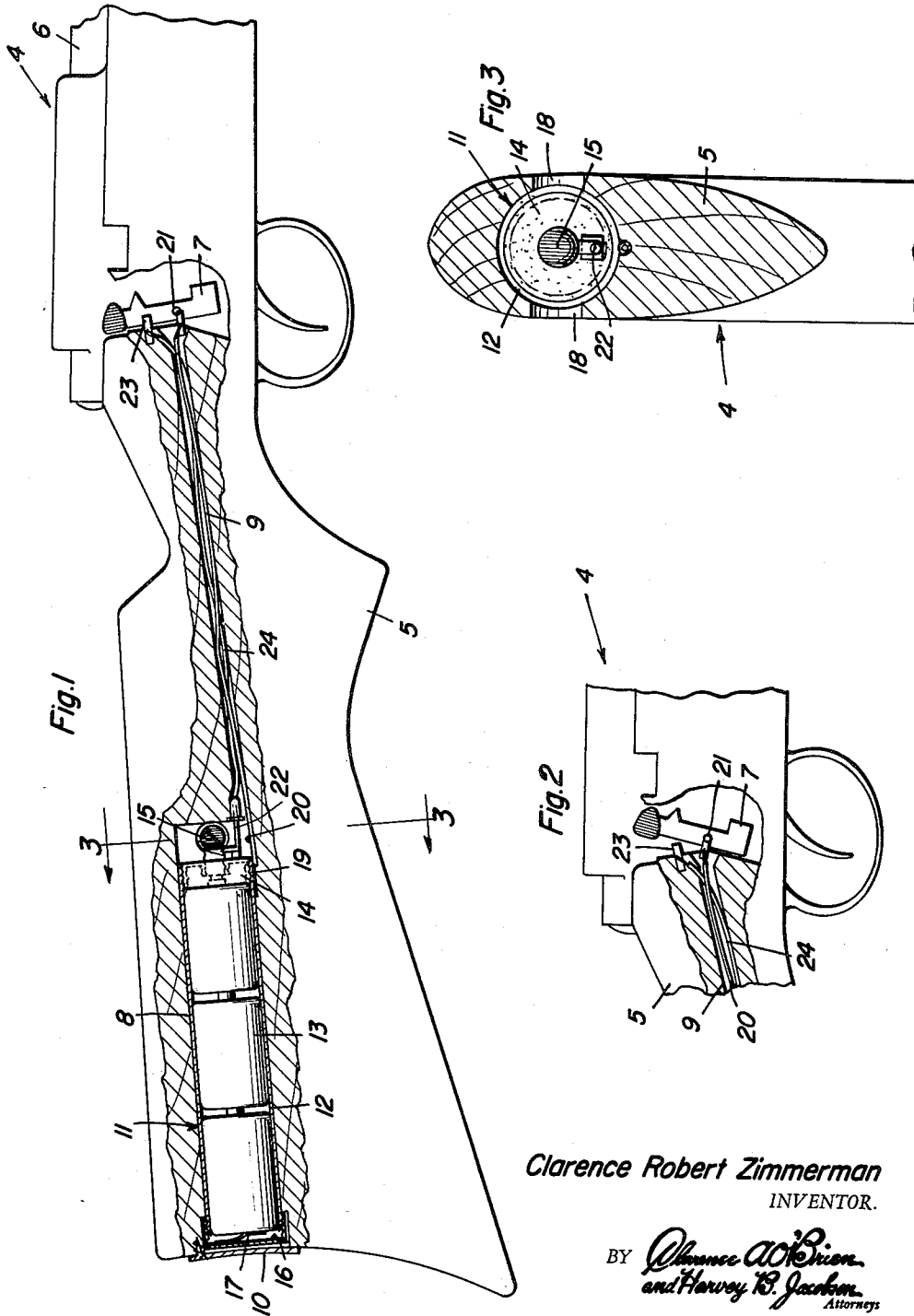
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WARNING SIGNAL LIGHT FOR FIREARMS

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WARNING SIGNAL LIGHT FOR FIREARMS
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This invention relates to new and useful improvements in warning signals for firearms, particularly rifles and shotguns and has for its primary object to provide, in a manner as hereinafter set forth, novel means for automatically and clearly indicating when the usual safety of the weapon is in the "off" or firing position.

Another very important object of the present invention is to provide a safety signal of the aforementioned character which may be incorporated in conventional firearms without the necessity of making material structural alterations therein.

Other objects of the invention are to provide a warning signal of the character described which will be comparatively simple in construction, strong, durable, compact, of light weight and which may be manufactured at low cost.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a view in side elevation, partially in section, of the rear portion of a gun equipped with a safety signal embodying the present invention, showing the safety in the "off" position;

FIGURE 2 is a fragmentary view of an intermediate portion of the gun, partially in section, showing the safety in the "on" or operative position; and

FIGURE 3 is a view in transverse section on an enlarged scale, taken substantially on the line 3—3 of FIGURE 1.

Referring now to the drawing in detail, it will be seen that reference character 4 designates generally the rear portion of a gun, said gun comprising a stock 5, a barrel 6, a safety 7, etc. Extending longitudinally into the stock 5 from the rear end thereof is a cylindrical chamber or bore 8. Extending forwardly from the chamber 8 to the safety 7 is a passage 9. A suitable closure 10 is provided for the rear end of the chamber 8.

Removably mounted in the chamber 8 is a self-contained light unit 11. The unit 11 includes a cylindrical shell or case 12 of suitable metal for the reception of a plurality of batteries 13. In the embodiment shown, a closure 14 of insulating material is mounted in the forward end portion of the case 12. Threadedly mounted in the closure 14 and electrically connected with the batteries 13 is a red flashing lamp 15. A cap 16 closes the rear end of the case 12. A spring 17 in the cap 16 yieldingly urges the batteries 13 forwardly for engagement with each other and with the electric lamp 15.

Windows 18 in the sides of the stock 5 communicate with the forward end portion of the chamber 8 in alignment with the lamp 15. Mounted in the forward portion of the chamber 8 is a contact 19 which is engageable by the case 12. A conductor wire 20 extends through the passage 9 and electrically connects the contact 19 to the safety 7 at the pivotal mounting 21 of said safety. Also mounted in the forward end portion of the chamber 8 is a contact 22 which is engaged with the base of the lamp 15. Mounted in the gun 4 adjacent the upper portion of the safety 7 for engagement thereby is a contact

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23. A conductor wire 24 in the passage 9 electrically connects the contacts 22 and 23.

It is thought that the operation of the invention will be readily apparent from a consideration of the foregoing. Briefly, when the safety 7 of the gun 4 is in the "on" position as shown in FIGURE 2 of the drawing, said safety is out of engagement with the contact 23 and the electric circuit of the lamp 15 is open. However, when the safety 7 is swung to "off" position (see FIGURE 1) said safety engages the contact 23. Thus, the electric circuit is closed and the lamp 15 is energized for flashing a red signal to be seen from either side of the stock 5 through the windows 18 for clearly indicating that the safety is "off" and that the gun is in firing condition.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A firearm including a pivoted metallic safety and a stock having a cylindrical chamber extending longitudinally therein from the rear end thereof, a stationary electric contact mounted longitudinally in the forward end portion of the chamber on the peripheral wall thereof, a self-contained electric light unit removably mounted in the chamber and including a cylindrical metallic shell slidably engageable with the stationary contact upon insertion of the unit in the chamber, said unit including batteries in said shell, a removable closure on the stock for the rear end of the chamber said unit still further including a cap of insulating material in the forward end portion of the shell, an electric lamp in the forward portion of the shell including a base mounted in and extending through the cap and electrically connected to the batteries, said base having an exposed portion forwardly of the cap, a second electric contact mounted on the forward end wall of the chamber and projecting rearwardly therefrom in inwardly spaced relation to said peripheral wall of said chamber and engageable with the exposed portion of the lamp base upon insertion of the unit in the chamber, and means for electrically connecting the contacts to the safety for energizing the lamp, said stock further having windows therein communicating with the chamber on opposite sides of the lamp, said stock still further having a bore extending longitudinally therein from the chamber to the safety, said means including a conductor wire extending through the bore and electrically connecting the stationary contact to the safety at the pivotal axis thereof, a third contact in the firearm in the path of the safety and engageable thereby when said safety is in the "off" position, and a conductor wire extending through the bore and electrically connecting the second contact to said third contact.

2. A firearm in accordance with claim 1, together with a removable closure cap on the rear end portion of the shell, and a spring in the cap yieldingly urging the batteries forwardly in said shell.

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