

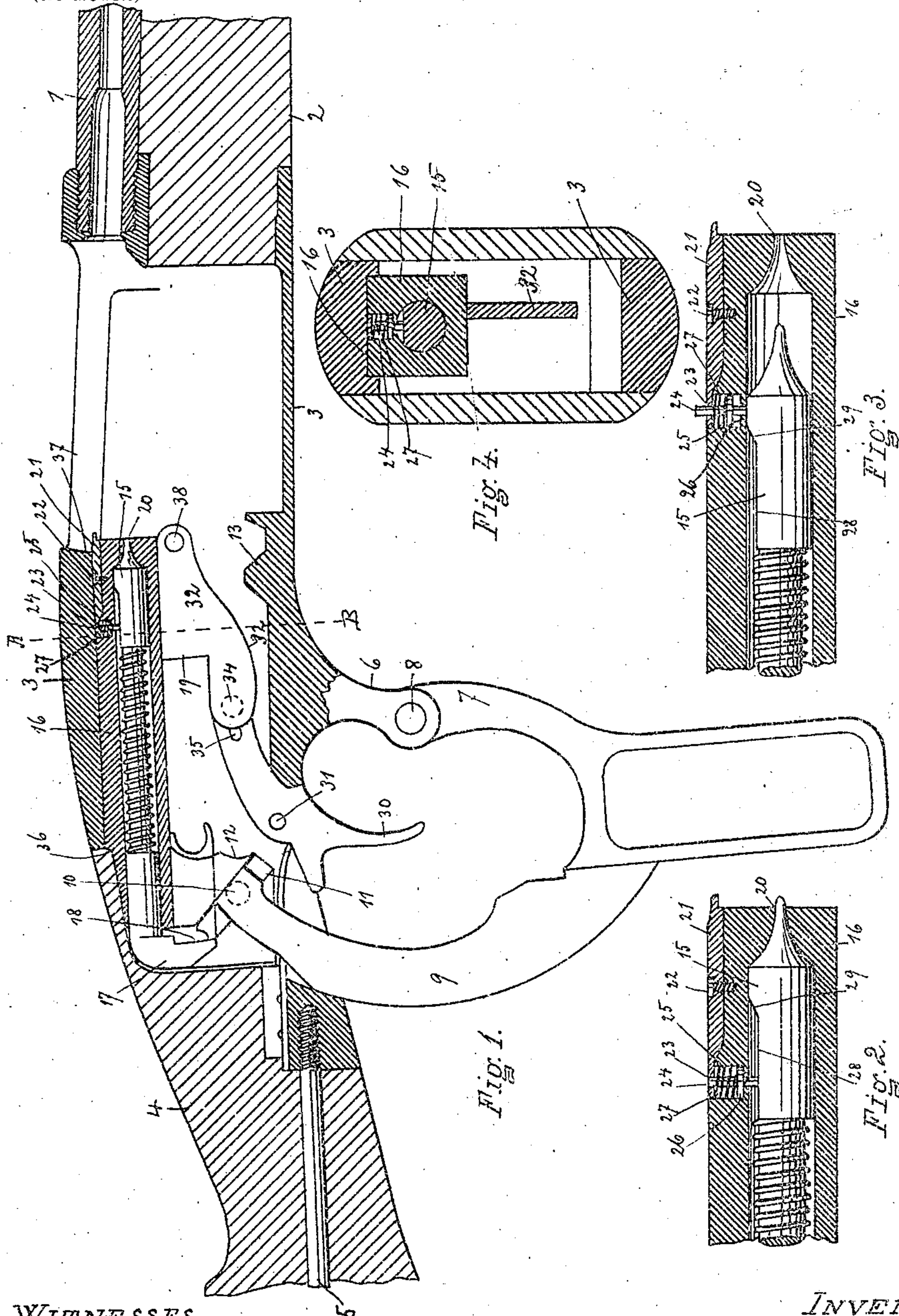
No. 654,280.

Patented July 24, 1900.

M. P. RICHARDS.  
AUTOMATIC COCKING INDICATOR.

(Application filed Dec. 31, 1898.)

(No Model.)



WITNESSES

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# UNITED STATES PATENT OFFICE

MORRIS P. RICHARDS, OF UTICA, NEW YORK.

## AUTOMATIC COCKING-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 654,280, dated July 24, 1900.

Application filed December 31, 1898. Serial No. 700,805. (No model.)

*To all whom it may concern:*

Be it known that I, MORRIS P. RICHARDS, a citizen of the United States of America, and a resident of Utica, Oneida county, New York, have invented certain new and useful Improvements in Automatic Cocking-Indicators, of which the following is a specification.

My invention relates to an automatic cocking-indicator on a bolt-lever-actuated gun; and it consists in the mechanism hereinafter described and claimed.

My invention has an automatic indicator for showing when the rifle is cocked ready for firing and to show when it is safe, and is particularly adapted to that class of lever-bolt guns where the movement of the lever into contact with the entire side of the frame cocks the rifle and where when the lever is opened the rifle is uncocked and is applicable only to that class of guns where the firing-pin is in the center of the breech-bolt and the breech-bolt and firing-pin are both retired into the frame when the action is open.

In the drawings, Figure 1 represents a vertical central longitudinal section of a rifle, the lever being shown in full lines, the broken lines indicating portions removed. Fig. 2 represents a longitudinal vertical section of the breech-bolt, showing the position of the firing-pin and cocking-indicator after the gun has been discharged, the firing-pin being shown in full lines, the broken lines representing parts removed. Fig. 3 is the same as Fig. 2, the firing-pin being in the position before the gun is discharged with the automatic cocking-indicator in the position which it assumes when the gun is cocked. Fig. 4 represents a cross-section of the rifle on lines A B of Fig. 1.

Similar numerals refer to corresponding parts in the several views.

The type of gun to which my automatic cocking-indicator is applied consists of a rifle having a reciprocating bolt action where the bolt is carried inside of the frame, which requires the cocking-indicator to be lowered so as to pass within the frame, and when the bolt is driven forward by the lever action the gun is cocked. On closing the lever against the under side of the stock the gun is cocked and the cocking-indicator assumes the position indicated in Fig. 3. When the

bolt is retired inside of the frame, as shown in Fig. 1, the cocking-indicator assumes the position shown in Figs. 1 and 2.

Having described in general terms the operation of the parts, I will now proceed to describe it more minutely.

In order to obviate the necessity of a repetition of parts of a gun to which my improvement relates, I will state the parts in general terms.

1 is the barrel; 2, the fore stock; 3, the frame; 4, the rear stock; 5, the butt-stock bolt; 6, the lug on the frame; 7, the pivot-lever; 8, the pivotal point; 9, a partially-concentric arm-carrying pin, (shown in dotted lines at 10,) showing the stud working in grooves 11.

12 illustrates the breech-bolt wing; 14, the free end of lever 9; 13, incline shoulder; 15, firing-pin; 16, breech-bolt; 17 and 18, downward-extending shoulders, which engage shoulder 19 on sear; 20, opening in face of breech-bolt; 21, cartridge-stop; 22, set-screw for holding the cartridge-stop.

My invention consists in an improvement of cocking-indicator, which I will now proceed to describe.

Through the rear of the cartridge-stop on the gun illustrated and shown I provide the opening 23 from the top of the breech-bolt into the firing-pin opening. Into this opening I place the cocking-indicator 24, which consists of a vertical plunger having a collar 26 on the same, and between the upper face of the collar and the under face of the cartridge-stop I interpose a coil-spring 25, which operates to force the plunger down. On the upper face of the firing-pin I provide two surfaces of different elevations. In this instance the lower elevation is indicated by the numeral 28 and the cocking indicator or plunger 24 in Fig. 3 stands on the upper elevation, which forces the cocking-indicator above the face of the breech-bolt. The shoulder between the two elevations is indicated by the numeral 29, as illustrated in Fig. 3. The lower end of the cocking-indicator or plunger rides on the surfaces of different elevations, so that when the gun is cocked ready for firing the cocking indicator or plunger rises above the face of the breech-bolt, as best illustrated in Fig. 3, and when the gun is in a safety position the firing pin or plunger assumes the po-



sition shown in Fig. 2, its upper face being flush with the breech-bolt.

My invention is applicable only to firearms where the firing-pin is within the breech-bolt and is especially applicable to guns where the breech-bolt is retired within the frame when the action is open, the arrangement being such that when the breech-bolt is retired within the frame the cocking-indicator is flush with the face of the breech-bolt.

When the parts are in the position indicated in Fig. 3, the gun is fired by applying force to trigger 30.

31 indicates the trigger-pivot; 32, the sear; 33, the slot in the sear; 34, the connecting-stud (shown in dotted lines); 35, the sear-pivot; 36, the breech-up shoulder.

The various parts indicated by the numerals cooperate in the process of breeching up and unbreeching the gun; and my invention relates solely to an indicator for indicating the safety or dangerous position of the gun by ocular demonstration to the operator or those interested in knowing the status of the firing mechanism.

Modifications of my cocking-indicator will readily suggest themselves to those skilled in the art; but the salient features of my invention consist in forming a cam-surface on the firing-pin, which engages and operates an indicator by raising the same above the face of the breech-bolt or depressing the same into the same line with the face of the breech-bolt, and it is applicable to that class of firearms where the cocking action takes place in a bolt-

lever gun when the lever is closed and the gun breeched for use and where the firing-pin works in the breech-bolt and both are retired within the frame, so that when the breech-bolt is carried inside of the frame the cocking-indicator is even with or below the surface of the breech-bolt as it passes into the frame.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a lever-action firearm, the combination of the reciprocating breech-bolt, the reciprocating firing-pin arranged longitudinally within and carried by said bolt, operating mechanisms, a frame into which said bolt is retired, said firing-pin provided with the longitudinal cam-faces, said bolt formed with a transverse opening from its exterior to the firing-pin, and the movable indicator carried by and moving with the bolt and located in said opening, said indicator at its inner end resting on said cam-faces of the firing-pin, whereby the indicator is withdrawn into the bolt when the bolt is retired into said frame, and the indicator is projected when the bolt is breeched and the firing-pin is cocked, substantially as described.

Signed by me at Utica, New York, this 28th day of December, 1898.

MORRIS P. RICHARDS.

Witnesses:

PHEBE A. TANNER,  
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