

UNITED STATES PATENT OFFICE.

ALEXANDER T. BROWN, OF SYRACUSE, NEW YORK.

LOCK MECHANISM FOR CONCEALED-HAMMER GUNS.

SPECIFICATION forming part of Letters Patent No. 345,362, dated July 13, 1886.

Application filed April 8, 1886. Serial No. 198,176. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER T. BROWN, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Lock Mechanisms for Concealed-Hammer Guns, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to the lock mechanism of concealed-hammer, or so-called "hammerless," guns.

The invention consists in the improved mechanism by which the hammers or strikers are cocked; also, in the safety-catch by which the hammer is held in cocked position.

In the drawings, Figure 1 is a perspective view of the frame, showing the oscillating bars and hammers. Fig. 2 is a side elevation of the breech mechanism, and so much of the lock as is necessary to illustrate the invention. Fig. 3 is a front end view of the frame.

A indicates the recoil-plate of a breakdown gun, and B B the straps constituting the frame to which the barrel is pivoted. In a double-barreled gun two rock-shafts, C C, are placed in perforations extending lengthwise of these straps. The front ends of these rock-shafts or rods have cranks D D attached thereto, these cranks extending into a slot in the fore-end E. By this arrangement of the rock-shafts and cranks the rock-shafts are partially turned on their axis when the gun is broken down, by reason of the movement of the fore-end on the hinge. The rear end of each rock-shaft C has an arm, F, projecting at about a right angle to its axis. The rocking of the shaft by the breaking down of the barrel causes this arm F to rise, and as the arm projects under the front end of hammer G the hammer is thrown back to full-cock by this breaking down of the barrel.

When hammer G is cocked, it is caught by a sear, as H, engaging a notch therein. A mainspring, I, presses the hammer forward. The sear H is held by the trigger in any usual manner, one plan being indicated in dotted lines, Fig. 2.

A rod, K, has a fork or loop resting on the arm H' of the sear, and extending up to the

tang M of the gun. The top of this rod K is held by a button, N, which button may be moved longitudinally of the tang by thumb-piece L, which has a pin, O, extending through a slot in the tang into the button N. When the bar K is in the position shown in Fig. 2, and the sear is released by a pull of the trigger, the bar K is free to rise, the upper end extending into hole or depression P in the tang, and the sear will release the hammer; but when the thumb piece or catch L is drawn back the bar K is swung away from the hole or depression P in the tang, and thus will not be permitted to rise. Consequently the sear cannot be unlocked from its engagement with the hammer.

Heretofore the device for locking the sear or trigger has usually been pivoted in the frame, where the operation has been by means of a push-button on the tang. I do not attach the rod K to the frame at all; hence it can be made more cheaply and applied more readily.

It is obvious that the safety pin or bar K may engage some other part of the lock as well as the sear.

The form of the hammer will correspond to the style of gun used. The same mechanism for cocking and the same safety-detent may be used in nearly every form of concealed-hammer breakdown guns, whether made with or without a separate firing-pin.

It must be understood that the rocking of the rock-shaft C is caused by the movement of the barrel in "breaking down" or opening the breech, and that this rock-shaft may be connected to and caused to move with the barrel by other means than by the fore-end, as by a hook or link on the barrel engaging an arm on the rock-shaft. The construction shown in Figs. 2 and 3 is a preferred one.

It will be understood that a safety device for holding the hammers cocked is almost a necessity in concealed-hammer guns, as without such device there is great danger that the gun may be discharged by an accidental touch of the trigger.

I claim—

1. The combination, with the frame of a breakdown gun, of a longitudinal rock-shaft having an arm on said shaft engaging the ham-

mer, and connection from the barrel to the rock-shaft, whereby when the breech is opened the shaft will be rocked and the hammer cocked.

5 2. The combination, with the frame of a breakdown gun, of a longitudinal rock-shaft therein, an arm on said rock-shaft bearing on the hammer in front of the hammer pivot, and an arm engaging with the fore-end stock,
10 whereby the rock-shaft is oscillated and hammer cocked when the gun is broken down.

3. The combination, with the sear, of a rod projecting upward from the same and discon-

nected from the frame, the tang having a perforation above this rod, and a push-button and
15 its operating-slide, the button embracing the upper end of the upwardly-projecting rod, so as to push it into line with or away from the perforation in the tang, substantially as described.
20

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

ALEXANDER T. BROWN.

Witnesses:

C. W. SMITH,
L. C. SMITH.