

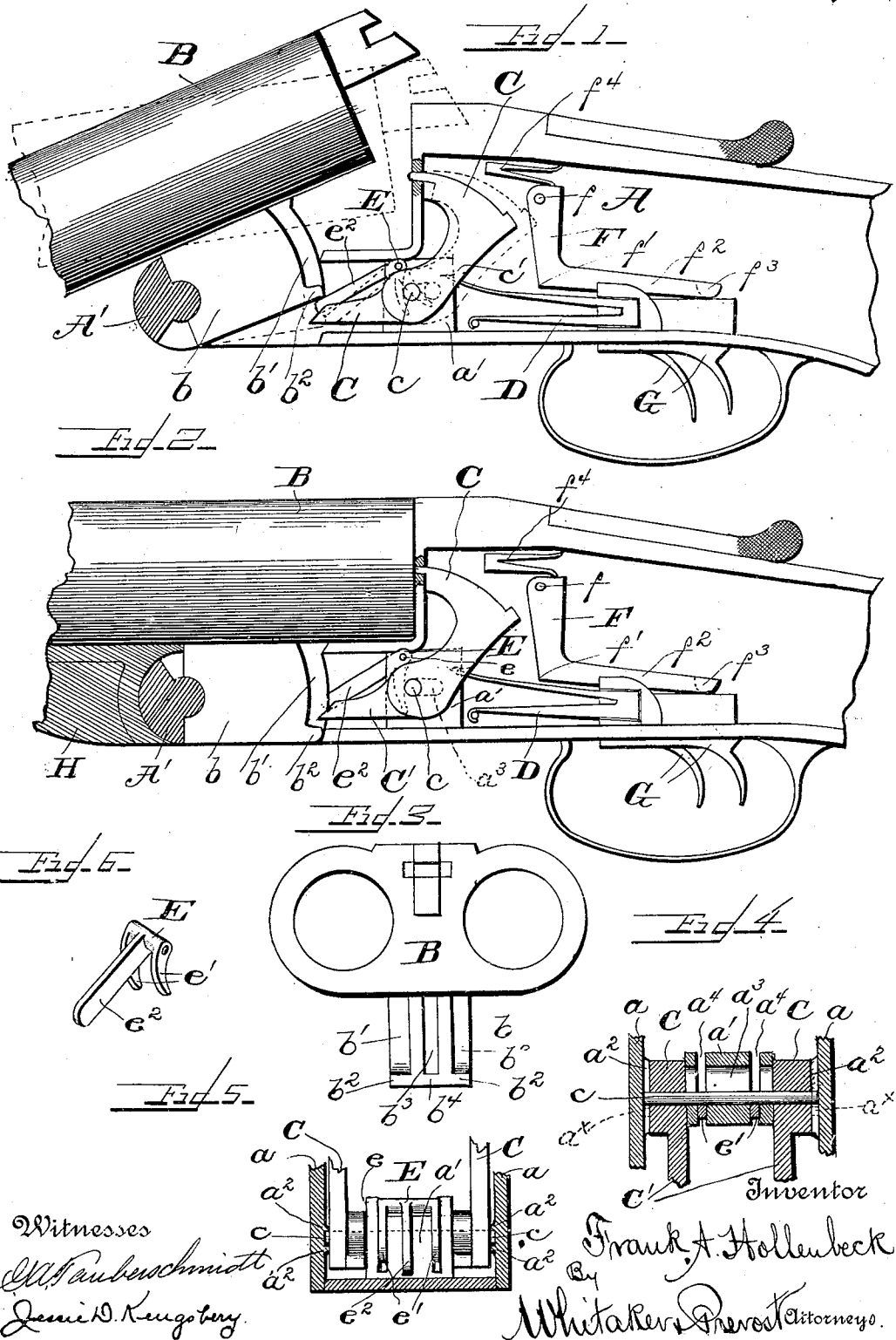
(No Model.)

F. A. HOLLENBECK.

SHIFTING MEANS FOR COCKING ARMS AND HAMMERS.

No. 524,145.

Patented Aug. 7, 1894.



UNITED STATES PATENT OFFICE.

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SHIFTING MEANS FOR COCKING ARMS AND HAMMERS.

SPECIFICATION forming part of Letters Patent No. 524,145, dated August 7, 1894.

Application filed October 23, 1893. Serial No. 488,888. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. HOLLENBECK, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Breech-Loading 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.

My invention is an improvement in breech-loading hammerless guns and consists in the novel features of construction and combination of parts hereinafter fully described, reference being had to the accompanying drawings which illustrate one form in which I have contemplated embodying my invention, and said invention is fully disclosed in the following description and claims.

The object of my invention is to provide a construction which will enable the cocking shoulders with which the barrel lug is provided, and the cocking arms of the hammers to be brought easily and quickly into operative relation, by simply assembling the parts of the gun and closing the breech, even though the cocking arms and hammers had been released and permitted to fall while the parts of the gun were separated.

To this end I provide a construction adapted to be struck and operated by a part connected with the barrels, for moving the pivot pin and cocking arms rearwardly until the cocking shoulders have passed below the cocking arms, when said arms are returned to their normal positions.

Referring to the said drawings, Figure 1 represents a portion of the stock and barrels of a gun embodying my invention, showing the gun broken to load. Fig. 2 is a similar view showing the gun closed. Fig. 3 is a rear elevation of the barrels showing the barrel lug. Fig. 4 represents a horizontal section through a portion of the lock casing, showing the arrangement of the hammers and their adjunctive devices. Fig. 5 is a vertical section showing the devices for moving the pivot pin of the hammers rearward. Fig. 6 is a detail of the lever construction for accomplishing this result.

In the drawings A represents the stock portion of the gun provided with pivot bolt A' and B the barrels.

b represents the coupling lug or barrel lug, as it is termed which has its rear end provided at each side with a cut away portion or recess b' terminated at the bottom of the lug by solid portions which I term cocking shoulders b² b². The central portion of the rear face of the lug b is also provided with a recess b³ (see Fig. 3) which is terminated at the bottom by a shoulder b⁴, which I term the retracting shoulder for convenience of reference.

C C represent the hammers of the gun, which are of usual construction and are mounted upon the pivot pin c. Secured to each of the hammers is a forwardly extending cocking arm C' preferably formed integrally therewith, which when the parts are in operative position and the breech closed, have their free ends lying in the recesses b' b' of the lug b, and above the cocking shoulders b² b² as shown in Fig. 2. The pivot pin c is supported in sliding bearings in the side plates a a of the lock casing and in the central web a' with which the lock casing is preferably provided. To this end the side plates a a are each provided with a pair of parallel ribs or guides a² a², preferably formed integrally therewith, as shown in Figs. 4 and 5, and the central web a' is provided with a horizontal slot a³ in the same plane as the parallel ribs. The pin c has its central portion engaging the slot a³ and its ends supported between the ribs a² a².

Each hammer is provided with a main spring D suitably mounted in the lock casing and having one end engaging a cam face c' in the rear of the hammer so that the spring will not only actuate the hammers upon their pivot, but will force said hammers and the pivot bolt or pin forward. The forward movement of the pin or bolt will be limited by the end of the slot a³ and when the parts are in their forward position the cocking arms C' C' will be in operative relation with the lug b as shown in Fig. 2.

I provide devices for retracting the pivot pin or bolt and thereby moving the cocking arms rearwardly when the parts of the gun

are assembled, so as to allow the lug b to pass down into the stock and the cocking shoulders $b^2 b^2$ to pass below the ends of the cocking arms when the hammers are down and assume operative relations therewith. In order to accomplish this I provide what I term a retractor for the pivot pin adapted to be operated by the barrel lug when the parts are assembled. The central web a' is provided in this instance with a pair of recesses $a^4 a^4$ which receive the operating arms of the retractor. The retractor consists of a rock sleeve E mounted on a pivot pin e in the upper part of the central web a' or in some other convenient part of the lock casing, and provided with a pair of arms $e' e'$, which extend into the recesses $a^4 a^4$ of the web, and engage the front edge of the pivot bolt as shown in Figs. 1, 2, 4 and 5. The rock sleeve is also provided with a lever or arm e^2 which extends forward into a position where it will be struck by the retracting shoulder b^4 of the lug as shown in Fig. 1 and thereby depressed, thus forcing the pivot pin and cocking arms rearward and allowing the cocking shoulders to pass beneath the cocking arms. As soon as the retracting shoulder has passed below the lever e^2 the said lever will enter the central recess b^3 of the lug and will allow the springs to force the pivot bolt and connected parts forward into operative position.

F represents one of the sears, there being one for each hammer, pivoted at f and having a shoulder f^1 for engaging a notch in the hammer. A rearwardly extending arm f^2 is provided with an offset f^3 to engage one of the triggers G G. A spring f^4 engaging the sear holds it in operative relation to the other parts. H represents a portion of the fore end which is of usual construction. The operation of my improvements will be understood from the foregoing description. When the parts are assembled the lug b of the barrels is placed in engagement with the pivot bolt A' of the stock and the breech closed. As the rear end of the lug descends the retracting shoulder b^4 will engage the lever e^2 of the retractor and force the pivot pin c and cocking arms C' C' rearwardly thereby allowing the cocking shoulders $c^2 c^2$ of the lug to assume operative relations with the cocking arms. The springs then move the pin c and cocking arms forward and the fore end is placed in engagement with the barrels in the usual way. If the barrels are broken and the breech opened, the cocking shoulders will raise the cocking arms and cock the hammers.

When it is desired to separate the parts the fore end is removed and the barrels depressed until the cocking shoulders lift the cocking arms far enough to allow the barrels to be removed, the hammers being caught and retained by the sears. The central recess b^3 in the lug will allow the lever e^2 to move therein to accommodate all the movements of the gun

in loading without any strain of the parts and without affecting the pivot pin.

It is obvious that I might dispense with the recesses a^4 in the central web a' and allow the arms of the retractor to pass outside the web, and engage the pivot pin c , if desired and I may also provide the parallel guides or ribs $a^2 a^2$ with stops to limit the forward movement of the pin at its ends, if desired, as indicated at a^x in dotted lines Fig. 4.

I do not desire to be limited to the exact details of construction herein shown and described as slight variations may be made therein without departing from the spirit of my invention.

What I claim, and desire to secure by Letters Patent, is—

1. In a fire arm the combination with the barrels and the barrel lug provided with cocking shoulders, of the hammers mounted upon a pivot pin movable longitudinally of the gun and the cocking arms for said hammers, and a retractor for moving the said pivot pin and cocking arms rearwardly to allow the cocking shoulders to pass below said arms in assembling the parts of the gun, substantially as described.

2. In a fire arm the combination with the barrels and the barrel lug provided with cocking shoulders, of the hammers, the pivot pin therefor, movable longitudinally of the gun, the cocking arms for said hammers and a retractor for moving said pivot pin and cocking arms rearwardly, said retractor having an arm in the path of and adapted to be operated by the barrel lug, substantially as described.

3. In a fire arm the combination with the barrels and the barrel lug provided with cocking shoulders, of the hammers, the pivot pin therefor movable longitudinally of the gun, the cocking arms for the hammer, the retractor having parts for engaging said pivot pin and a lever extending into the path of and operated by the barrel lug, and the main springs engaging cam portions combined with the hammers and forcing said hammers, pivot pin and cocking arms into operative position, substantially as described.

4. In a fire arm the combination with the barrels and the barrel lug provided with cocking shoulders, of the hammers, the pivot pin therefor movable longitudinally of the gun, the cocking arms for the hammers, supports for the ends of said pivot pin and the retractor provided with arms for engaging said pin and a lever in the path of the barrel lug, substantially as described.

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

FRANK A. HOLLENBECK.

Witnesses:

JESSIE D. KINGSBERRY,
L. P. WHITAKER.