(No Model.)

F. A. HOLLENBECK.

SHIFTING MECHANISM FOR COCKING ARMS OF BREAKDOWN GUNS.

No. 520,959. Patented June 5, 1894.

Fig. 1.

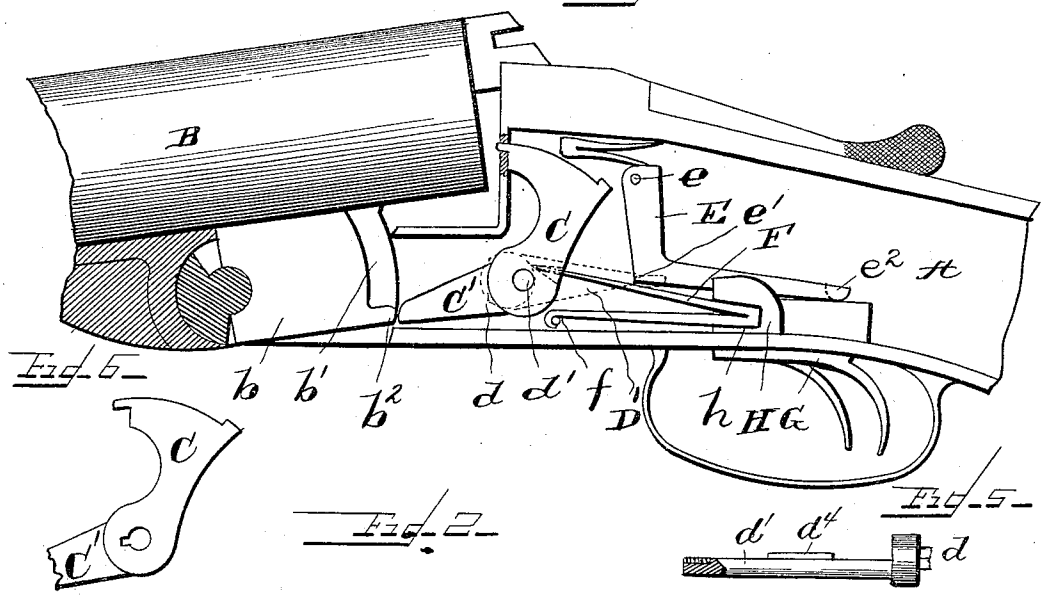


Fig. 6.

Fig. 2.

Fig. 5.

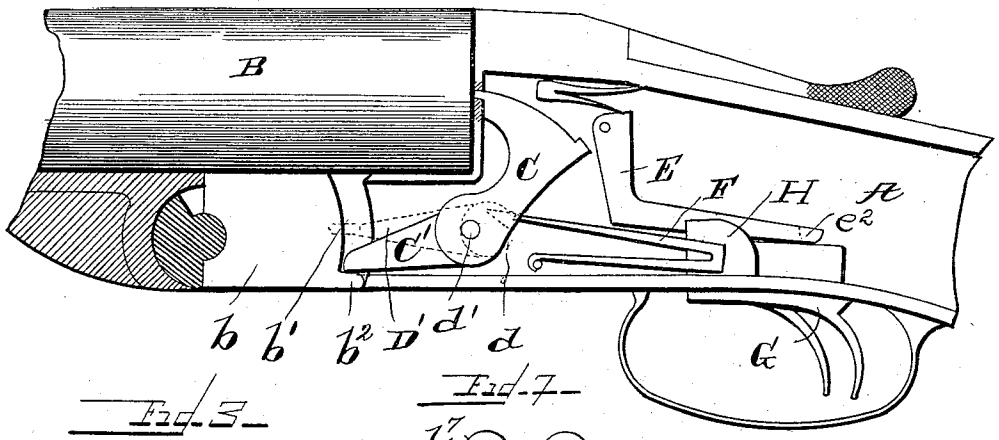


Fig. 7.

Fig. 3.

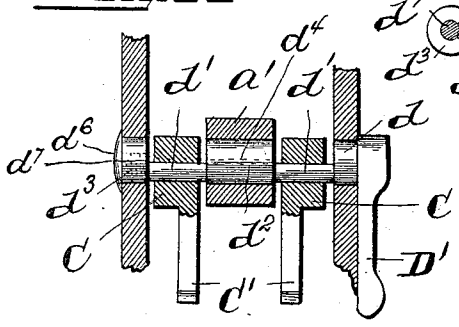
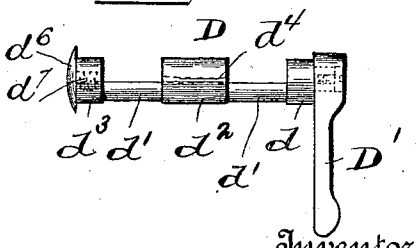


Fig. 4.



Witnesses
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SHIFTING MECHANISM FOR COCKING-ARMS OF BREAKDOWN GUNS.

SPECIFICATION forming part of Letters Patent No. 520,959, dated June 5, 1894.

Application filed June 10, 1893. Serial No. 477,179. (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 hammerless breech loading guns and consists in the novel features of construction 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 easily and quickly brought into operative relation in assembling the parts and closing the breech, even though the hammers should have been released by the sears and permitted to fall after the separation of the barrels from the stock. This is accomplished by moving the cocking arms rearwardly out of the path of the cocking shoulders when the breech is to be closed and afterward moving them forward into operative relation with the cocking shoulders.

Referring to the said drawings, Figure 1 represents a side elevation partly in section of a portion of a gun embodying my invention showing the rear portion of the barrels, and the adjacent portion of the stock. Fig. 2 is a similar view showing the parts in different positions. Fig. 3 is a detail sectional view showing the eccentric pivot pin and the position of the hammers and cocking arms thereon. Fig. 4 is a detail of the eccentric pivot pin and its operating lever. Figs. 5, 6, and 7, are details of parts of the mechanism.

In the accompanying drawings A represents the stock portion of the gun and B the barrel portion, b representing the barrel lug provided adjacent to its rear edge with a recess b' on either side terminated at its lower end by a shoulder b^2. These shoulders b^2 b^2 I term the cocking shoulders.

C represents one of the pivoted hammers, each of which is provided with a forwardly extending cocking arm C′ formed integrally therewith or secured thereto.

D represents the pivot pin upon which the hammers are eccentrically mounted which is constructed preferably as shown in the drawings, see particularly Figs. 3, 4 and 5. The pin D is provided with cylindrical portions or blocks at each end and in the center which engage suitable bearing apertures in the sides of the lock casing and in a rib a' intermediate the ends of the pin, although this central bearing may be dispensed with if desired. The pin is also provided intermediate its ends and between the bearing portions, with eccentric portions upon which the hammers are pivotally mounted. I prefer to construct the eccentric pin as follows, see Figs. 3, 4, 5, 6 and 7, in order to allow the parts to be conveniently assembled: The eccentric portions are provided with a bolt d' which has a cylindrical bearing block d at one end preferably formed integrally with the bolt, the bolt being eccentric with respect to the block. The central bearing block d^2 of the pin, is a sleeve formed separately from the bolt d, the bolt being provided with a spline d^4 which engages a notch d^5 in the sleeve d^2 so that the sleeve will revolve with the rod when the parts are in operative position. The cylindrical portion or block d^3 on the other end of the bolt is provided with an aperture to receive the bolt. A screw threaded recess is bored in the center of the block which also extends into the bolt d' and a cap d^6 having a screw threaded shank d^7 is screwed into said aperture thereby locking the bolt d' and block d^3 together and preventing the bolt, which is shoved into place from the other side, from being withdrawn. In assembling the parts, the central block d^2 is placed in its bearing, the hammers are placed in position and the bolt d' is then inserted through the bearing recess in the side of the block and pushed through the hammer, the central block and into the block d^3. As the spline d^4 must of necessity pass through one of the

hammers before it can engage the central bearing portion d^2 the recess of said hammer will be notched to allow the spline to pass, as shown in Fig. 6. An operating arm or lever D′ is secured to the pin D outside of the lock casing preferably by a screw coupling it to the block d, of the pin and by moving this arm the pin can be rotated so as to throw the hammers and their cocking arms forward or backward. The cocking arms normally extend into the recesses b' of the lug b and above the cocking shoulders b^2 b^2, so that when the gun is broken to load the same, the cocking arms are raised and the hammers cocked.

F represents one of the main springs which is operatively connected with the hammer in a suitable manner, one end of said spring engaging a pin f and the bent or central portion engaging a recess h in a block H secured to the lock casing, as shown.

E represents one of the sears which is pivoted at e and has a shoulder e' for engaging the hammer. The sear has a rearwardly extending arm provided with an offset e^2 for engaging one of the triggers G.

When it is desired to separate the barrels from the stock, the lever D′ is moved to rotate the pin D and throw the hammers and cocking arms rearward far enough to remove the cocking arms from operative relation with the cocking shoulders b^2 b^2 as shown in Fig. 1. The barrels may then be removed in the usual manner and replaced when desired. After they are replaced and the gun closed, the arm D′ is moved in the opposite direction to throw the hammer and cocking arms forward and bring the cocking arms again into operative relation with the cocking shoulders of the lug as shown in Fig. 2, when the parts are in position for use.

I do not desire to be limited to the exact details of construction and combination of parts herein described and shown as 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 provided with cocking shoulders, of the hammers, the cocking arms therefor, capable of movement longitudinally of the gun, a movable part outside the gun, and connections between said movable part and the cocking arms whereby the cocking arms can be moved out of the path of the cocking shoulders in assembling the parts of the gun, substantially as described.

2. In a fire arm the combination with the barrels provided with cocking shoulders, of the hammers, the cocking arms therefor capable of movement longitudinally of the gun, a lever outside the gun, and connections between said lever and the cocking arms whereby the cocking arms can be moved out of the path of the cocking shoulders in assembling the parts of the gun, substantially as described.

3. In a fire arm the combination with the barrels provided with cocking shoulders, of the hammers the cocking arms therefor, a pivot pin having eccentric portions engaging the cocking arms and operating devices for said pin whereby the cocking levers are moved out of the path of the cocking shoulders in closing the gun, substantially as described.

4. In a fire arm the combination with the barrels provided with cocking shoulders, of the hammers and cocking arms therefor, a revoluble pivot pin having eccentric portions engaging said hammers and an operating lever outside of the lock casing connected with said pin, for moving the cocking arms out of operative relation with said cocking shoulders to permit the removal and return of the barrels, substantially as described.

5. In a fire arm the combination with the barrels provided with cocking shoulders, of the hammers, and cocking arms therefor, a revoluble pivot pin provided with bearing blocks engaging bearings in the lock casing, a bolt passing through said bearing blocks, eccentric to the same for supporting the hammers, and devices for connecting said bolt and blocks together for joint movement, substantially as described.

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

FRANK A. HOLLENBECK.

Witnesses:
L. P. WHITTAKER,
JESSIE KINGSBERY.