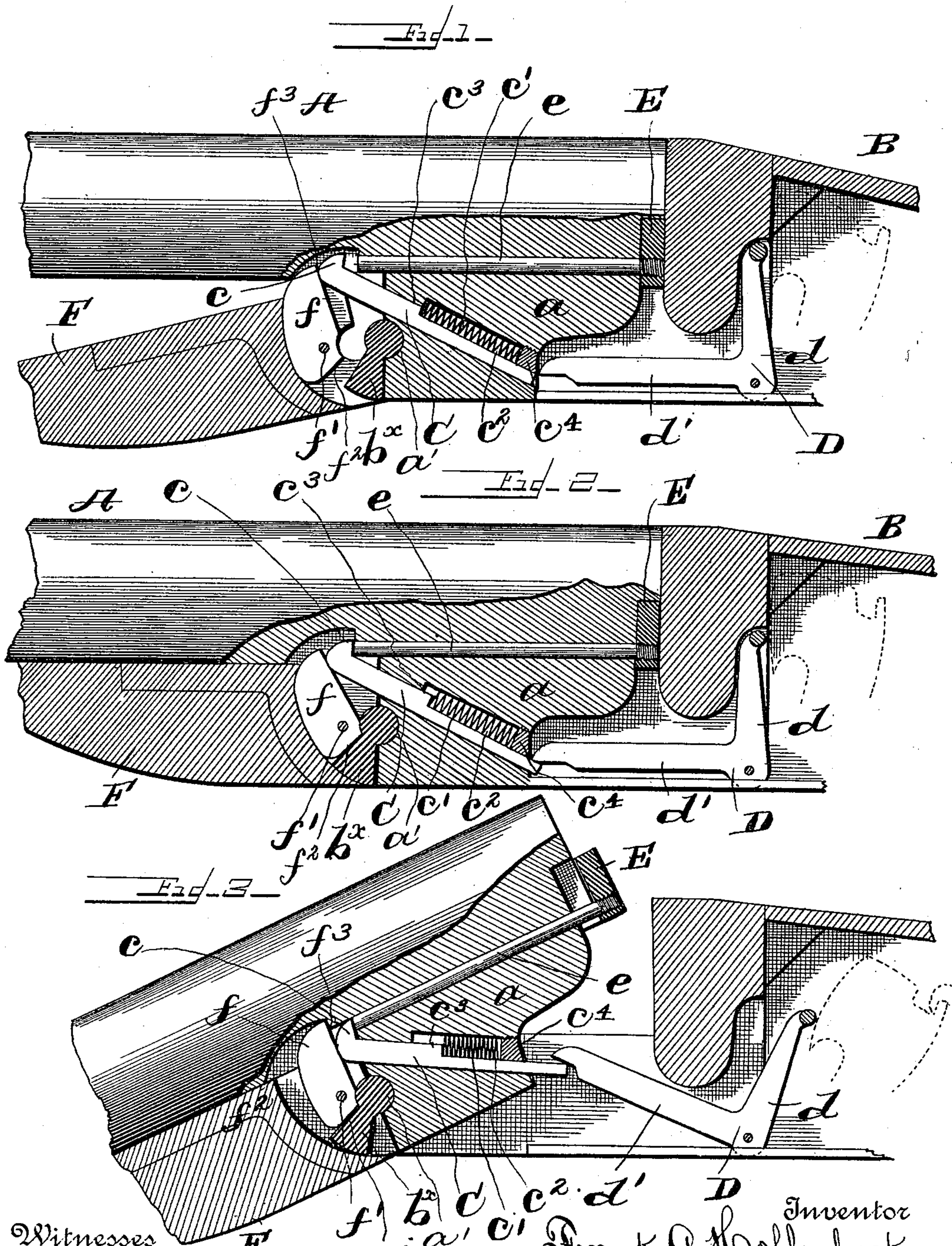


(No Model.)

F. A. HOLLENBECK.  
BREAKDOWN GUN.

No. 481,327.

Patented Aug. 23, 1892.



Witnesses

G. A. Taubenschmidt,  
Jesse Klingenberg.

Inventor  
Frank A. Hollenbeck

By  
Whitaker & Preston

Attorneys.



# UNITED STATES PATENT OFFICE.

FRANK A. HOLLENBECK, OF BATAVIA, NEW YORK, ASSIGNOR TO THE  
BAKER GUN AND FORGING COMPANY, OF SAME PLACE.

## BREAKDOWN GUN.

SPECIFICATION forming part of Letters Patent No. 481,327, dated August 23, 1892.

Application filed February 16, 1892. Serial No. 421,716. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK A. HOLLENBECK, a citizen of the United States, residing at Batavia, in the county of Genesee and State of New York, have invented certain new and useful Improvements in Firearms; 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 firearms; and it consists in certain novel features of construction and combination of parts hereinafter fully described.

In the accompanying drawings I have shown one form in which I have contemplated embodying my invention, and said invention is fully disclosed in the following description and claims.

Referring to the said drawings, Figure 1 is a central sectional view of a portion of the barrels and stock of a gun embodying my invention, showing the fore-end detached. Fig. 2 is a similar view showing the fore-end applied to the gun. Fig. 3 is a similar view showing the gun bent or broken, ready for reloading.

In the said drawings, A represents the barrel portion of the gun, and B the stock portion. The barrels A are provided with the downwardly-extending coupling-lug *a* in the usual manner, said lug having a semicircular recess *a'* to engage the pivot-bolt *b* of the stock, the lug *a* engaging a recess in the forwardly-projecting portion of the stock in the usual manner.

The lug *a* is provided with an inclined recess, preferably square or polygonal in cross-section, in which is located the cocking-bolt C, provided at its upper end, adjacent to the barrels, with an upwardly-projecting lug or arm *c*, the said bolt being slightly longer than the length of its recess. The cocking-bolt is provided with a spring, which tends to force it in a direction toward the muzzle of the gun, and I have shown this spring *c'* located in an enlargement *c<sup>2</sup>* of the polygonal bolt-recess, the said spring engaging a shoulder *c<sup>3</sup>* on the bolt C and being held in its recess by a screw-plug *c<sup>4</sup>*. The breech-block of the gun-stock B is provided with the pivotally-mounted cocking-lever D of usual construction, having an arm *d*, provided with suitable means for en-

gaging the hammers of the gun, which are indicated in dotted lines. The cocking-lever D has an arm *d'*, extending forward into the vicinity of the cocking-bolt and provided, if desired, with a recessed portion to provide a bearing-surface for engagement with the end of the cocking-bolt.

E is the shell-extractor, provided with the operating stem or rod *e*, which extends to a point adjacent to the lug or projection *c* of the cocking-bolt. When the stock and barrels are placed together with the lug *a* of the barrels engaging the pivot-bolt *b* and before the fore-end F has been placed in operative position, the parts will be in the positions shown in Fig. 1. The spring *c'* will hold the cocking-bolt out of engagement with the cocking-lever D and the lug *c* of the cocking-bolt out of contact with the extractor-rod *e*, as will be clearly seen in the drawings.

The fore-end F is constructed in the usual or ordinary manner, and suitable means are provided to lock it to the barrels when in operative position. The rear portion of the fore-end is provided with a construction to engage the pivot-bolt *b* in the usual manner, and in this rear portion is pivoted the ejector *f*, which is held in place in a recess provided for it by the pin *f'*. This ejector *f* is provided with a short straight side *f<sup>2</sup>*, which is adapted to engage a solid portion *b<sup>x</sup>* of the breech-block or stock adjacent to the bolt *b*, and said ejector is also provided with a longer straight side *f<sup>3</sup>*, which is adapted to engage the end of the cocking-bolt C when the fore-end is placed in operative position upon the gun. It will be seen by reference to Figs. 1 and 2 that when the fore-end is placed in engagement with the gun the ejector *f* will engage the forward end of the cocking-lever and move it longitudinally as the fore-end is shoved into place upon the barrels. This longitudinal movement of the cocking-bolt causes its rear end to project from its recess and engage the bearing-surface of the operating-arm *d'* of the cocking-lever D, and at the same time the lug or projection *c* of the cocking-bolt will be made to engage the stem *e* of the extractor, as clearly shown in Fig. 2. The gun is then in condition for operation. When the gun is opened or broken, as shown in Fig. 3, the ejector *f* will be held in a stationary position with respect to the stock or



breech-block, while the barrels will move with respect to said ejector. In consequence the ejector will act as a lever, being held from movement by the solid wall  $b^x$ , and its face  $f^3$  will force the cocking-bolt C to move longitudinally and rearwardly. As the barrels are depressed the rear end of the same will rise and with it the lug  $a$  and cocking-bolt C, and the said cocking-bolt having been placed in engagement with the cocking-lever, as before stated, when the fore-end was placed in position the arm  $d'$  of the cocking-lever will be raised, thereby forcing back the hammers and cocking the gun. The longitudinal movement of the cocking-bolt prevents it from becoming disengaged from the arm  $d'$  of the cocking-lever, which might otherwise occur by reason of the swinging of said cocking-lever on its pivot, as will be readily understood. The longitudinal movement of the cocking-bolt also effects the positive operation of the cartridge-shell extractor E, the lug  $c$  of the bolt engaging the rod  $e$  of the extractor, as will be readily seen in Fig. 3. When the gun is closed, the extractor will be forced in, and by reason of its engagement with the lug  $c$  of the bolt C will positively return the bolt to its original position. (Shown in Fig. 2.) The spring  $c'$  would perform this function; but by this construction it is positively insured by the extractor, even though the spring should become broken, and the breaking of the spring would not in the least affect the perfect and accurate operation of the gun. When it is desired to separate the barrels and stock, the fore-end F is removed, when the spring  $c'$  will force the cocking-bolt forward longitudinally, disengaging it from the arm  $d$  of the cocking-lever D and also from the extractor, so that the barrels can be readily removed from the stock.

It will be observed that by my construction I provide a cocking-bolt which positively and simultaneously operates both the cocking-lever and the extractor and which is positively returned to its original position by the extractor, and I also provide means whereby the said cocking-bolt can be instantly disconnected from the cocking-lever by removing the fore-end.

I do not desire to be limited to my exact details of construction, as herein set forth and shown, for 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 firearm, the combination, with the cocking-lever and the shell-extractor, of a cocking-bolt operatively connected with the said cocking-lever and extractor, substantially as described.

2. In a firearm, the combination, with the cocking-lever and the extractor, of the longitudinally-movable cocking-bolt engaging said extractor and the ejector engaging the said cocking-bolt, substantially as described.

3. In a firearm, the combination, with the extractor and cocking-lever, of the longitudinally-movable cocking-bolt engaging the said extractor, the spring engaging and moving the cocking-bolt in one direction, and the ejector engaging and moving the said cocking-bolt in the opposite direction, substantially as described.

4. In a firearm, the combination, with the cocking-lever pivotally secured to the stock portion of the arm, of the cocking-bolt movably mounted in the barrel portion of the arm, a spring for moving said bolt out of engagement with said lever, and the fore-end provided with means for retaining the cocking-bolt in constant engagement with the cocking-lever when said fore-end is placed in proper position upon the barrel portion of the firearm, substantially as described.

5. In a firearm, the combination, with the cocking-lever, of the longitudinally-movable cocking-bolt secured to and moving with the barrels, a spring engaging said cocking-bolt and adapted to move it in a direction to disengage it from the cocking-lever, and the fore-end provided with a construction to engage said bolt when the fore-end is attached to the gun and hold the cocking-bolt in constant engagement with the cocking-lever against the force of said spring, substantially as described.

6. In a firearm, the combination, with the cocking-lever and extractor, of the longitudinally-movable cocking-bolt secured to and moving with the barrels, having a portion operatively engaging the cocking-lever and a portion operatively engaging a part connected with the extractor, and means for positively moving said cocking-bolt longitudinally, substantially as described.

7. In a firearm, the combination, with the cocking-lever and the extractor, of the longitudinally-movable cocking-bolt secured to and adapted to move with the barrels, having a part operatively engaging the cocking-lever and a portion operatively engaging a part connected with the extractor, and the ejector for moving said cocking-bolt longitudinally when the gun is broken to effect the operation of the extractor, substantially as described.

8. In a firearm, the combination, with the cocking-lever pivoted in the stock and the extractor, of the cocking-bolt adapted to engage said cocking-lever and extractor, the spring operatively engaging the said cocking-bolt, the fore-end, the ejector pivoted to the fore-end and having a part adapted to engage a rigid portion connected with the stock, substantially as described.

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

FRANK A. HOLLENBECK.

Witnesses:

W. T. MYLCRANE,  
E. M. BAKER.