(No Model.)

J. FRICK.

BREECH LOADING FIRE ARM.

No. 428,597. Patented May 27, 1890.

Fig. 1.

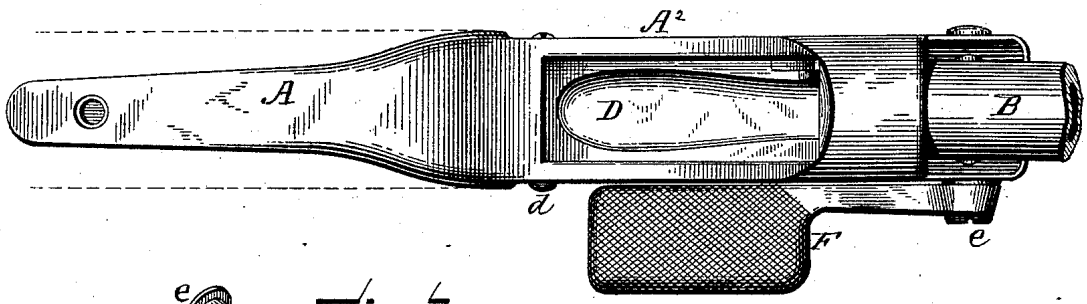


Fig. 3.

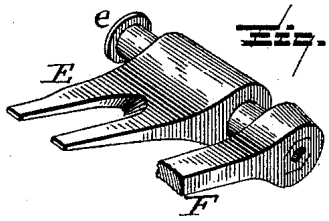


Fig. 2.

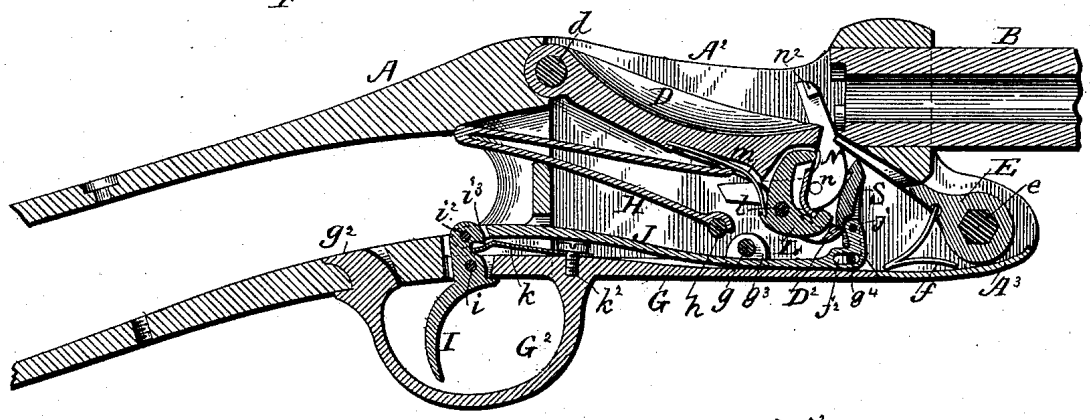


Fig. 4.

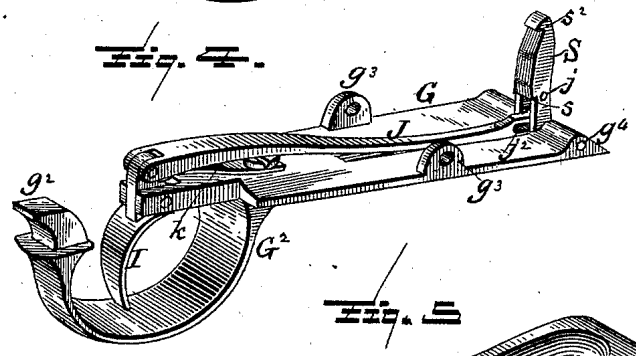
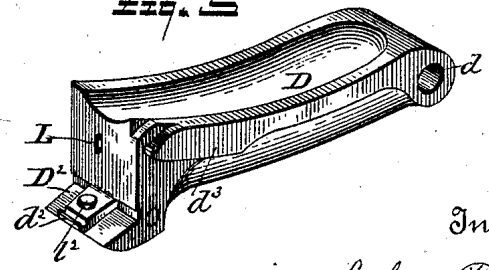


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN FRICK, OF LARAMIE, WYOMING TERRITORY.

BREECH-LOADING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 428,597, dated May 27, 1890.

Application filed February 24, 1890. Serial No. 341,548. (No model.)

To all whom it may concern:

Be it known that I, JOHN FRICK, a citizen of the United States, residing at Laramie, in the county of Albany and Territory of Wyoming, have invented certain new and useful Improvements in Breech-Loading Fire-Arms, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of breech-loaders in which the breech-block is hinged at the rear and swings downward and carries the firing-pin pivoted to its front end; and the objects of my improvement are to make a simple and strong breech-loader, in which the breech-block-depressing arm is pivoted to the frame in front of the breech-block, and the operating-lever of said arm is arranged on the side of the receiving-chamber in position to be depressed either by the right hand or by the fingers of the left hand reaching from under the gun-barrel while said left hand is clasping the stock. I accomplish these objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a top view of a breech-loader constructed in accordance with my invention. Fig. 2 is a longitudinal vertical section of the same with the breech-block depressed and retained at full-cock, but with the shell-extractor rearwardly inclined in the position it occupies after a sudden depression of the breech-block and before the introduction of a cartridge within the barrel. Fig. 3 is a perspective view of the breech-block-depressing arm and a portion of its operating-lever. Fig. 4 is a perspective view of the trigger-guard and plate carrying the sear, and the connecting-rod uniting said sear to the trigger; and Fig. 5 is a perspective view of the breech-block.

In said drawings, A represents the frame, to which the barrel B is secured in the usual manner. Said frame has formed integral therewith cheek-pieces A^2 and a bottom connecting-plate A^3, uniting their front portions. The bottom between the cheek-pieces is closed by the trigger-guard plate G, which has at its rear end the trigger-guard G^2. The rear end of said guard is in the form of a hook g^2, which engages in a perforation in the frame; but the guard-plate G is also secured to the cheek-pieces A^2 by a screw g passing through them and through lugs g^3 projecting up from the guard-plate into the cavity of the frame. (The removal of the screws g and of the guard-plate G permits access to the interior.)

The breech-block D is pivoted at d to the cheek-pieces and its rear end is strongly backed by the frame A′. It has its upper surface concaved, as usual, to facilitate the introduction of a cartridge into the barrel of the gun. The lower portion of its front is provided with a forwardly-extended shelf D^2, to permit said front end to be depressed by the forked end of an arm E, pivoted at e to the front portion of the cheek-pieces of the frame. Said arm is adapted to be depressed by the operator to cock the gun by means of a hand-lever F, having one end secured to polygonal pivot-bolt e and its opposite end presenting a broad surface along the right side of the frame and extending rearwardly to a point opposite the breech-block in a convenient position to be reached from under the fire-arm by the ends of the fingers of the left hand of the operator supporting the gun. The forked arm E and its operating-lever F are kept normally elevated by a light folded leaf-spring f, having one end in engagement with and pressing under said arm E, while the other end rests upon the bottom plate A^3.

To promptly elevate the front end of the breech-block, when it is released by the sear S, a broad folded flat spring H has one end made to press upon the under side of said breech block, while its opposite end is bent to form a shallow hook and rests upon a screw h, passing through the cheek-pieces of the frame. The bent end of the spring also abuts against the frame and is thereby retained in position.

To retain the breech-block in a depressed position at full-cock, as shown in Fig. 2, the front edge of the shelf D^2 has in its middle portion a lip d^2, that comes into engagement with the lower notch s of the sear. The same lip comes into engagement with the upper notch s^2 of the sear when it is desired to retain the breech-block nearly closed at half-cock.

The sear is pivoted at g^4 to the guard-plate. It is united to the trigger I by means of a connecting-rod J, which has its front end bent

upwardly and pivoted to the sear at j, at a point higher than the pivot g^4, and, to permit the rod J to rest close to the guard-plate, the front end of said rod is slotted at j^2 for the passage of the pivot-pin g^4.

The rear end of the rod J is pivoted to the trigger at i^2, at a point higher than or eccentric to the pivot-pin i of said trigger, and to keep the sear slightly inclined toward the breech-block and facilitate its engagement therewith the upper end of the trigger has a lip i^3, extending forwardly, under which one end of the trigger-spring k is made to press, the opposite end of said spring being secured at k^2 to the guard-plate.

The firing-pin L is angular and is pivoted at l to the lower portion of the front end of the breech-block in cavity made therein for the purpose; but its lower end l^2 is made to project a short distance through the shelf D^2, and is retained in that position by a spring m, having one end in engagement in a notch formed in the firing-pin in the rear of its pivot l, while the opposite end is retained in a notch in the under side of the breech-block, and the spring m also keeps the firing end l^3 of the firing-pin retracted within the breech-block until the trigger is pulled and the front end of said breech-block is projected upward to its seat, at which time the lever end l^2 of the firing-pin will strike against the under side of the barrel, and its pointed end l^3 will thereby be projected forward against the priming in the rear of the cartridge and explode it.

The cartridge-shell extractor N is in the form of a bell-crank and pivoted at n to one of the cheek-pieces of the frame on the inside thereof. Its upper arm has a lip n^2 extending laterally to engage with the rim of the cartridge-shell and extract it when the breech-block is suddenly depressed to the lowest end of its course, said location being lower than that in which it is retained at full-cock by the sear, as shown in Fig. 2, the lower arm of the extractor being then pressed upon by a projection d^3 on one side of the breech-block. When said breech-block is retained at full-cock, the lower arm of the extractor is not pressed upon by the projection d^3, and its upper arm is permitted to be swung forward. The insertion of the cartridge into the gun-barrel restores the extractor to its normal position in the side of said barrel.

Having now fully described my invention, I claim—

1. The combination of a fire-arm breech-frame, a breech-block having its rear end pivoted thereto and provided with a shelf at its front end, with a forked arm pivoted to the breech-frame and having its forked ends adapted to rest upon the shelf of the breech-block, and a lever secured to the pivot of the forked arm and extending rearwardly alongside of the breech-frame, substantially as described.

2. The combination of a fire-arm breech-frame, a breech-block having its rear end pivoted thereto and provided with a shelf at its front end, a forked arm pivoted to the front of the breech-frame and adapted to rest upon said shelf, an angular firing-pin pivoted to the breech-block, a sear adapted to engage with the front of the shelf of the breech-block, and a connecting-rod uniting the sear to the trigger, substantially as described.

3. The combination of a fire-arm breech-frame, a breech-block having its rear end pivoted thereto and provided with a shelf at its front end, an angular firing-pin pivoted to the breech-block, a spring having one end secured to the under side of the breech-block, a sear adapted to engage with the front of the shelf of the breech-block, and a connecting-rod having its front end slotted for the passage of the pivot-pin of the sear, and a trigger provided with a lip on its upper end and a spring pressing under said lip, substantially as described.

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

JOHN FRICK.

Witnesses:
L. C. HILLS,
C. C. SCHILLER, Jr.