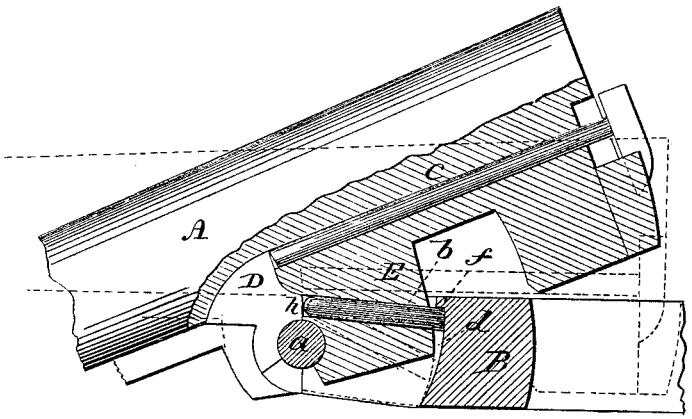
(No Model.)

A. E. WHITMORE.

BREECH LOADING FIRE ARM.

No. 262,521. Patented Aug. 8, 1882.



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UNITED STATES PATENT OFFICE.

ANDREW E. WHITMORE, OF SPRINGFIELD, MASS., ASSIGNOR TO THE COLTS PATENT FIRE-ARMS MANUFACTURING COMPANY, OF HARTFORD, CONN.

BREECH-LOADING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 262,521, dated August 8, 1882.

Application filed May 4, 1882. (No model.)

To all whom it may concern:

Be it known that I, ANDREW E. WHITMORE, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new Improvement in Breech-Loading Fire-Arms; and I do hereby declare the following, when taken in connection with accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents a longitudinal section.

This invention relates to an improvement in that class of breech-loading fire-arms in which the barrel is hinged to the frame, so as to be tilted up at the breech for the insertion of cartridges, commonly called "breakdown arms." In this class of arms a shoulder or stop, which arrests the tilting up of the barrel, is close to or very near the pivot on which the barrels turn. The frequent breaking down of the arm, unless it be done with great care, upsets the shoulder, so as to disfigure the arm, if it does not interfere with its proper working.

The object of my invention is to arrange the stop to arrest the breaking down movement of the barrels at a considerable distance from the pivot, whereby the strain upon that stop will be proportionately reduced; and it consists in a bolt arranged in a lug upon the under side of the barrels, and in the vertical longitudinal plane of the barrels, arranged to be automatically thrown rearward as the barrels are tilted, and so as to engage a shoulder on the frame to arrest the rise of the rear end of the barrels and be automatically pushed into the lug as the barrels are closed, as more fully hereinafter described.

A represents the barrels; B, the arm, which extends forward from the frame, and to which the barrels are pivoted, as at *a*.

C is the usual extractor-spindle, and D the cam with which that spindle engages at the proper time in the ascent of the barrels to throw the extractor rearward.

E is a lug upon the under side of the barrels in rear of the pivot, and which enters a recess in the arm B of the frame when the barrels are closed, so as to aid in the support of the barrels in their proper position. In this lug a bolt, *b*, is arranged, inclined to the axis of the barrel, but in the same vertical longitudinal plane as the barrels.

The face of that part of the frame or arm B directly in rear of the lug E is recessed, as at *d*, and so as to form a shoulder, *f*, near its upper side, as shown, and this recess and shoulder are in the vertical plane in which the bolt *b* will move in opening or closing the barrels—that is, from one of the two positions indicated in the drawing to the other, broken lines indicating the closed position and solid lines the open or tilted position. The face of the recess *d* inclines rearward—that is, recedes from the arc which would be described by the nose of the bolt were it stationary in the lug, and as shown.

The forward end of the bolt extends toward the cam D, or any suitable shoulder prepared for it, and against which that end will strike in the movement of the barrels from the closed to the open position, and thus striking the cam or shoulder *h* the bolt will be forced forward as from the position in broken lines to that seen in solid lines, and so as to bring the rear end or nose of the bolt beneath the shoulder *f* on the frame. By this construction the bolt *b* and shoulder *f* form a stop at a considerable distance in rear of the pivot on which the barrels turn, and so far as to greatly reduce the strain upon that stop compared with the shoulder when arranged near the pivot. When the barrels are returned the nose of the bolt follows the face of the recess *d*, and is thereby forced back into the lug, as seen in broken lines. The movement of the bolt is positive in both directions. No springs are required to operate it, hence there is no liability to disarrangement, and it produces a strong and reliable stop. The arrangement of the sliding bolt *b*—that is, so as to be automatically moved outward and inward—does not interfere with the removal or introduction of the barrels from or to the frame, as would be the case were there a permanent shoulder on the lug which would engage the shoulder *f* on the frame.

I claim—

In that class of fire-arms in which the barrels are hinged to an arm extending forward from the frame so as to tilt up at the breech, and commonly called "breakdown arms," the combination of the bolt *b*, arranged in a lug on the barrels in rear of the pivot, with a shoulder, *f*, on the frame in rear of the lug, and a shoulder, *h*, forward, by which, in the moving of the barrels, the bolt will be thrown backward to engage said shoulder, substantially as described.

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