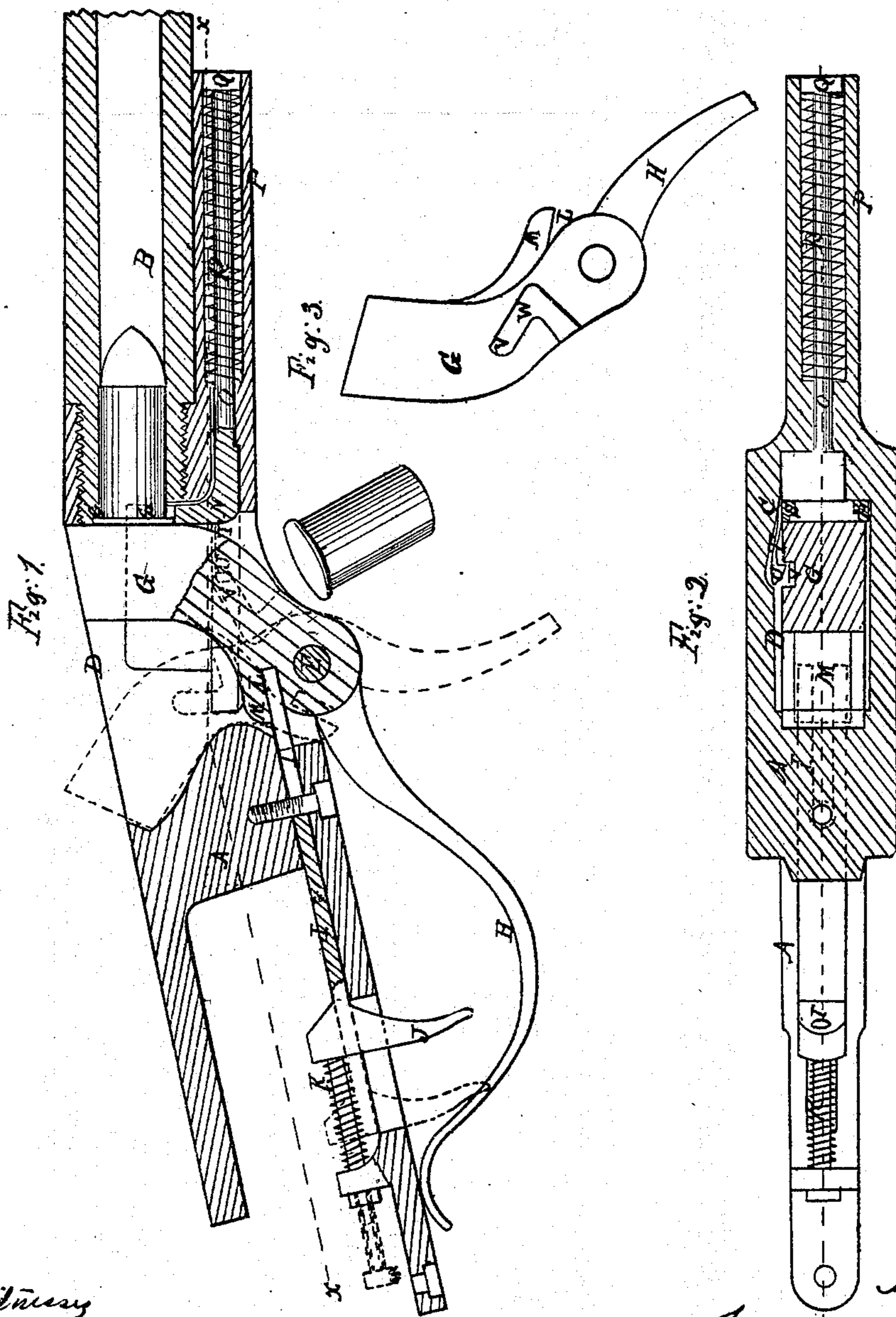


I. BRADLEY.  
Breech-loading Fire-arm.

No. 56,890.

Patented Aug. 7, 1866.



Witnesses  
*J. M. Hoington*  
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# UNITED STATES PATENT OFFICE.

ISAAC BRADLEY, OF HARTFORD, CONNECTICUT.

## IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 56,890, dated August 7, 1866.

*To all whom it may concern:*

Be it known that I, ISAAC BRADLEY, of Hartford, in the county of Hartford and State of Connecticut, have invented new and useful Improvements in Breech-Loading Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

The present invention consists in forming the breech-piece of the fire-arm and the trigger-guard in one and the same piece, and so hanging it within the frame of the fire-arm that the breech-piece can be swung up and against the breech end of the barrel, and away from the same, to allow a cartridge to be inserted in or its case removed from the barrel, the said breech-piece, when against the breech end of the barrel, being there firmly held by means of a spring slide or catch placed upon the under side of the frame or stock of the fire-arm, and so arranged with regard to the said breech-piece as to interlock with a notch or groove upon its rear side, this spring catch or slide also serving to hold the breech open when swung away from the barrel.

In accompanying plate of drawings the improvements embraced in the present invention are illustrated, Figure 1, being a central longitudinal vertical section through a portion of the barrel and the stock or frame of a gun with my improvements applied thereto; Fig. 2, a horizontal transverse section taken in the plane of the line *xx*, Fig. 1; Fig. 3, a detail view of the combined breech-piece and trigger-guard detached from the gun stock or frame.

A in the drawings represents the stock or frame of the fire-arm, and B the barrel, secured to each other in any of the ordinary modes practiced therefor. In the frame of the fire-arm, back of the breech end C of the barrel B, I form an opening or slot, D, extending entirely through the frame from its upper to its lower side, in which slot, turning upon a fulcrum or center-pin E, is hung the breech-piece G, made in one piece with the trigger-guard H, the said slot being of suitable shape to allow the said breech-piece, by properly moving the trigger-guard H, to be swung back and away

from the breech end of the barrel sufficiently to allow a cartridge to be placed therein or removed therefrom through the upper side of the said slot, the position of the breech-piece when swung away from the breech end of the barrel, as well as the trigger-guard, being shown by red lines in the drawings, Fig. 1.

I is a spring-slide arranged upon the under side of the stock A, and extending in the direction of its length, with an outward-projecting arm or handle, J, for operating or moving it, which slide, when the breech-piece is against the barrel, by interlocking itself, through the action of its spring K, with the notch or groove L, formed in the rear side of the breech-piece and under its lug M, firmly holds it up and against the barrel, and consequently receiving and supporting the recoil of the breech produced by the discharge of the fire-arm, this slide, when the breech-piece is swung away from the barrel, also serving to hold it in such position, by bearing against the lug M, hereinbefore referred to, upon its rear side, as is plain to be seen by an inspection of Fig. 1.

Before swinging the breech-piece away from the rear end of the barrel the slide by which it is held thereat is first disengaged from it, leaving it then free to be moved.

N is a plate or frame placed just below the bore of the barrel, at its rear or breech end and within the slot or opening in which the breech-piece moves. O is a rod attached to the lower side of plate N and extending within a tube or casing, P, under the barrel B, in the direction of its length, with a head, Q, upon its outer end, between which and the shoulder *a* of the interior of the said tube P is placed a spring, R, coiled or spirally wound around the said shaft. This plate N has two upright arms, S S, one upon each side of the barrel-bore, the upper ends of both which are suitably formed to receive the flange of the cartridge-case placed within the barrel. T is a spring fastened to one side of plate N, passing along the same side of the breech slot or opening D, with a hook, U, upon its outer end. This hook-shaped end of the spring T, when the breech-piece is against the rear end of the barrel, is interlocked with the inner end, V, of an angular groove or slot, W, formed in the corresponding side or face of the said breech-piece, as plainly shown



in Figs. 1 and 2, (in the first figure, however, by dotted lines,) by the peculiar shape of which slot the said hook is caused to be drawn along with the breech-piece as it is swung away from the barrel, taking with it the plate O, and consequently the cartridge-case engaged by its flanged end with its upright arms, until, by the swing or circular movement of the breech-piece, the hook has turned the angle Y and entered the portion Z of the said slot, when, as such portion of the said slot is then in the same line with the said spring T, its hook end is set free and the plate N then drawn back to its original position by the action of its spring R, connected therewith, as

explained, this movement of the said plate N causing the cartridge-case, if one is contained in the barrel, to be withdrawn or ejected therefrom, falling through the lower open end or side of the breech-slot D.

I claim as new and desire to secure by Letters Patent—

The arrangement of the spring-slide I in the stock A, operating, with the breech-piece G, provided with the lug M, in the manner and for the purpose herein specified.

ISAAC BRADLEY.

Witnesses:

S. W. GREGORY,  
GEORGE CASE.