

W. S. SMOOT.

Improvement in Breech-Loading Fire-Arms.

No. 116,106.

Patented June 20, 1871.

Fig. 1.

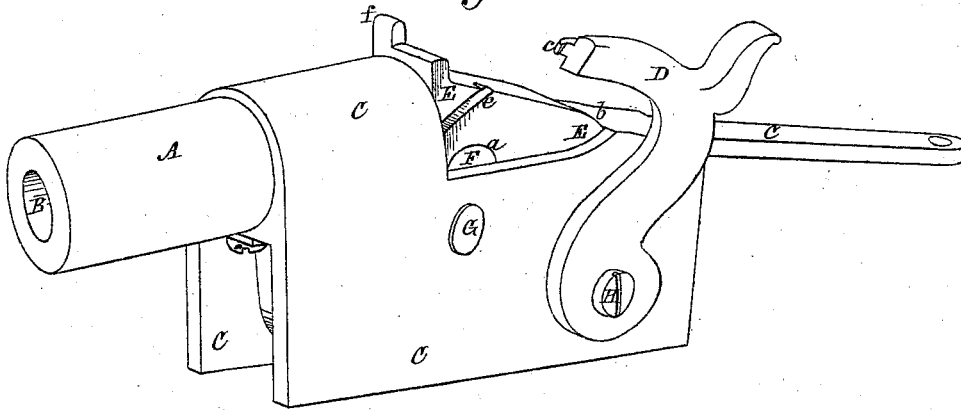
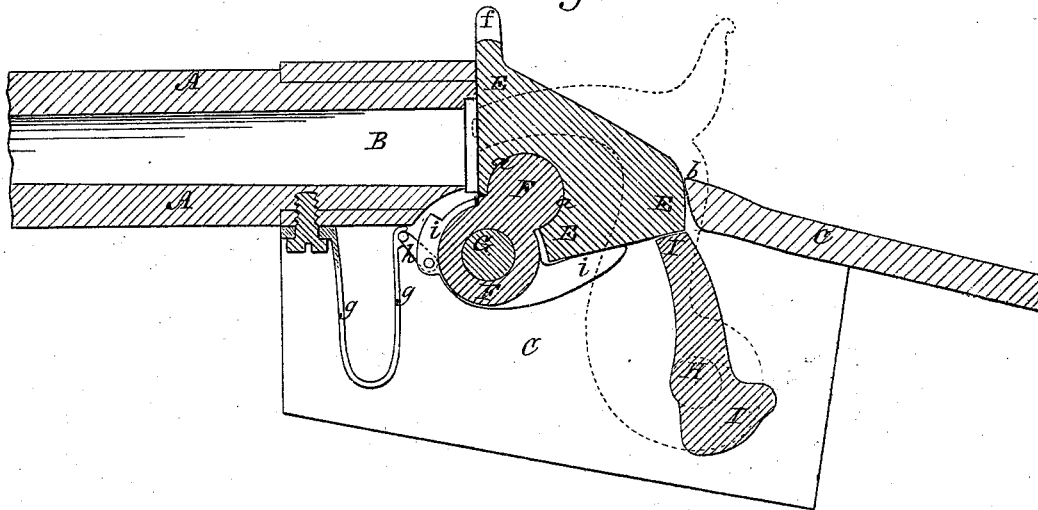


Fig. 2.



Witnesses.  
A. H. Anderson  
Edmund Masson.

William S. Smoot  
By atty. A. B. Stoughton.

# UNITED STATES PATENT OFFICE.

WILLIAM S. SMOOT, OF ILION, NEW YORK.

## IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 116,106, dated June 20, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM S. SMOOT, of Ilion, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Breech-Loading Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents, in perspective, so much of a gun as will illustrate my invention; and Fig. 2 represents a section through the same.

Similar letters of reference, where they occur in the separate figures, denote like parts of the fire-arm in the drawing.

My invention relates to the interposition, use, and operation of a solid breech-block between the open rear end of the chamber and the bearings on the frame in connection with a link and tumbler, as and for the purpose hereafter to be explained.

A represents the barrel of the arm, and B the chamber therein. C represents the frame of the arm, and D the hammer. E is a solid breech-block, which is connected to a link, F, by means of an articulated joint, as at *a*, or otherwise, which link is hung to the frame by a substantial pin, G, so that the breech-block may have a slight motion independent of the link, and then swing with the link as said block moves to and from the open end of the chamber B to close and open the bore of the arm; the first of its motion, in swinging open, being to clear it of the end *b* of the frame, and then it swings on the pivot or pin with the link. The hammer D, as herein shown, is at the side of the frame, and is hung upon a pin, axis, or shaft, H, that passes through and is supported in the frame; and when thus made or hung the nib *c*, on the head of the hammer, passes through a slot or arc, *e*, made in the side

of the solid block E as it falls to strike the cartridge and explode it. The hammer may, however, be set in rear of the breech-block by cutting a mortise or opening for it in the frame at that point, and strike a firing-pin passing through the block to explode the cartridge, if that plan be preferred; or may in any other well-known way explode the cartridge from that rear position. Upon the shaft, axis, or pin H, on which the hammer is hung, and which moves with the hammer, there is placed a tumbler, I, which, when the hammer is thrown forward or downward, moves under the breech-block E, as seen in Fig. 2, and firmly holds or braces said block against the recoil of the explosion.

When the block is to be swung back to open the chamber for reloading, the hammer is first drawn back to half-cock, which moves the tumbler out from under the block; then, by the thumb-piece *f*, the block is moved on the link far enough to clear the frame, and then with the link into the loading position.

Upon the pin G is placed an ejector, *i*, the rear of which is struck by the block E when it is swung backward and downward, and causes a shoulder upon its forward portion to take against and back out the empty cartridge-case. A spring, *g*, and link *h* are connected to the ejector to restore it to its normal position when the block is swung up to close the breech.

Having thus fully described my invention, what I claim is—

The solid block E, interposed between the open rear end of the chamber and the bearings on the frame, in combination with the link F and tumbler I, as and for the purpose described and represented.

W. S. SMOOT.

Witnesses:

A. B. STOUGHTON,  
EDMUND MASSON.