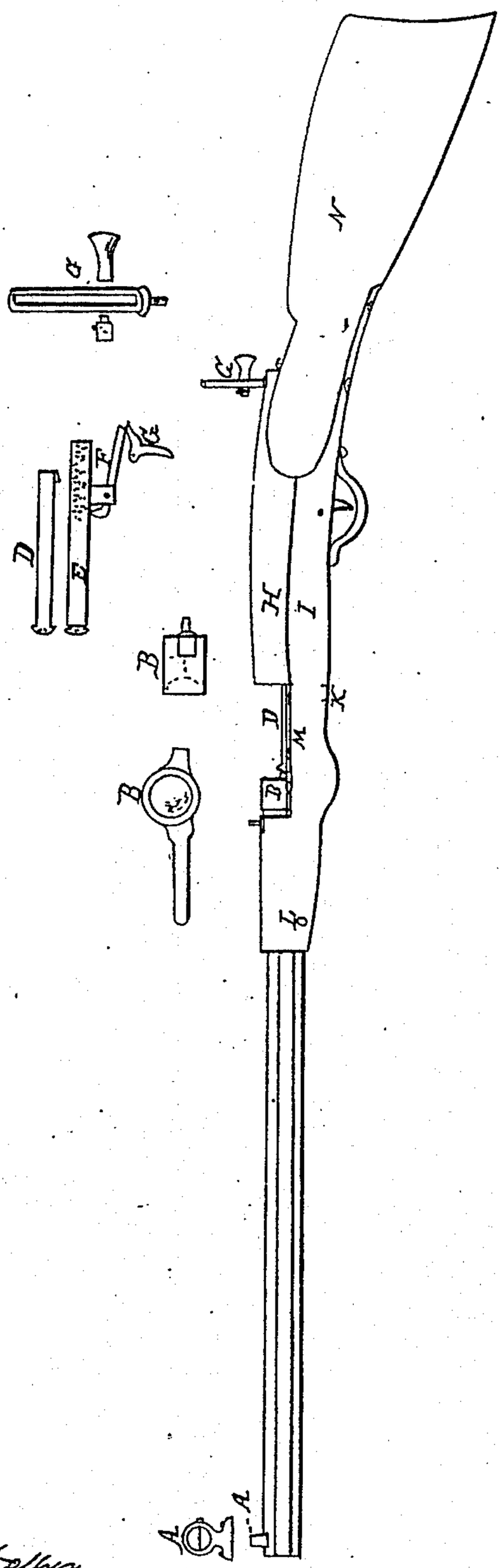
F. MATON.

Breech-Loading Fire-Arm.

No. 11,938. Patented Nov. 14, 1854.



Witnesses
Washington Hasslow
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UNITED STATES PATENT OFFICE.

FRANCIS MATON, OF NEW YORK, N. Y.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **11,938**, dated November 14, 1854.

To all whom it may concern:

Be it known that I, FRANCIS MATON, of the city of New York, in the county of New York, the State of New York, have invented a new and Improved Breech-Loading Rifle; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists, first, in the combination of a sliding breech-piece, having a semi-spherical socket and a partially-rotating motion while closing on the end of the barrel, with a fixed barrel having a corresponding semi-spherical end; whereby the powder is brought nearer to the point at which the cap is exploded, and renders the ignition more certain and the joint between the breech-piece and the barrel more effectually closed.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I take a rifle-barrel, the breech end of which I form into a semi-spherical shape to fit exactly with a similar formed semi-spherical socket made in the end of the breech-piece, (shown at B in the accompanying drawings,) and fitting over the end of the barrel like a cup. Near the muzzle of the barrel I fasten my front sight, A, with screws or otherwise. This sight consists of a small needle placed horizontally inside of a metal tube to protect it. In the center of this needle is a small bead to take sight with. I then make the sliding breech-piece B of malleable iron or steel, the part fitting the breech of the barrel forming with the barrel a cup and ball. At the back part of this breech-piece the lever runs across to the right, and on the left there is a projecting piece, which, as well as the lever, serves to lock the breech-piece into the stock. The stock I make of malleable iron. The upper part, H, is fastened to the lower part, I, by a screw in the top, and also holds the butt N. My lock I place between these two parts of the stock, and fasten it there by letting it into the metal. This simple lock consists of a hammer or cylinder, D, a brass tube, E, a small lever, F, and the trigger G. In the brass tube E, I place a steel-wire spiral spring, which drives the hammer forward on the piston, which is in the center of the breech-piece B. My back globe-sight I fasten near the butt in the upper part of the stock, as seen at G. This I make of an open piece of steel graduated on the side, into which opening I place from behind the screw-piece of the sight, and by screwing on the front cup I fasten it, so that it cannot slide up and down. According to the distance I want to shoot, I raise or lower this globe-sight by giving the cup a half-turn to the left, and turning back to fasten it where I want it. I fasten my barrel into the stock I by a pin, L. I cock my piece by striking the lever of B upward. Then by placing two or three fingers in front of the lever and the thumb behind, and pressing downward and pulling toward me, I open the breech of barrel, and cock my piece with the same motion as the breech-piece carries back the cylinder D with it, which is retained by the lever F, the end of this lever resting on the trigger, so that when the trigger is pulled it detaches the lever from the cylinder, which flies forward and breaks the cap. My breech-piece is kept in the stock I by a small steel bar, M, which is fastened down by screws. The projection and lever of breech-piece are locked into the stock I by being pressed into the grooves of the stock. I make a round or square hole in the stock I, which hole is marked K, to let the exploded caps fall out, or they are driven out by the breech-piece being drawn backward.

Having thus fully described the nature of my invention, I would state that I am aware that breech-pieces have been made with conical ends for fitting into gun-barrels, and that a horizontal "cross-hair" has been used in various mathematical instruments. These I do not claim; but

What I do claim as of my invention, and desire to secure by Letters Patent, is—

1. The combination of a sliding breech-piece, having a semi-spherical socket and a partially rotating motion while closing on the end of the barrel, with a fixed barrel having a corresponding semi-spherical end, the two forming a cup-and-ball joint, whereby the

powder is brought nearer to the point at which the cap is exploded, a more certain ignition attained, and the joint between the breech-piece and the barrel more effectually closed, substantially as described.

2. The employment for the front sight of a fire-arm of a needle-wire or its equivalent, having a bulge or enlargement at or near its middle, which is in a horizontal position when the arm is leveled for firing, as described.

New York city, March, 1854.

FRANCIS MATON.

Witnesses:
WASHINGTON E. JACKSON,
H. MORRISON.