

J. DAVIS.
Breech-loading Fire-arm.

No. 39,198.

Patented July 7, 1863.

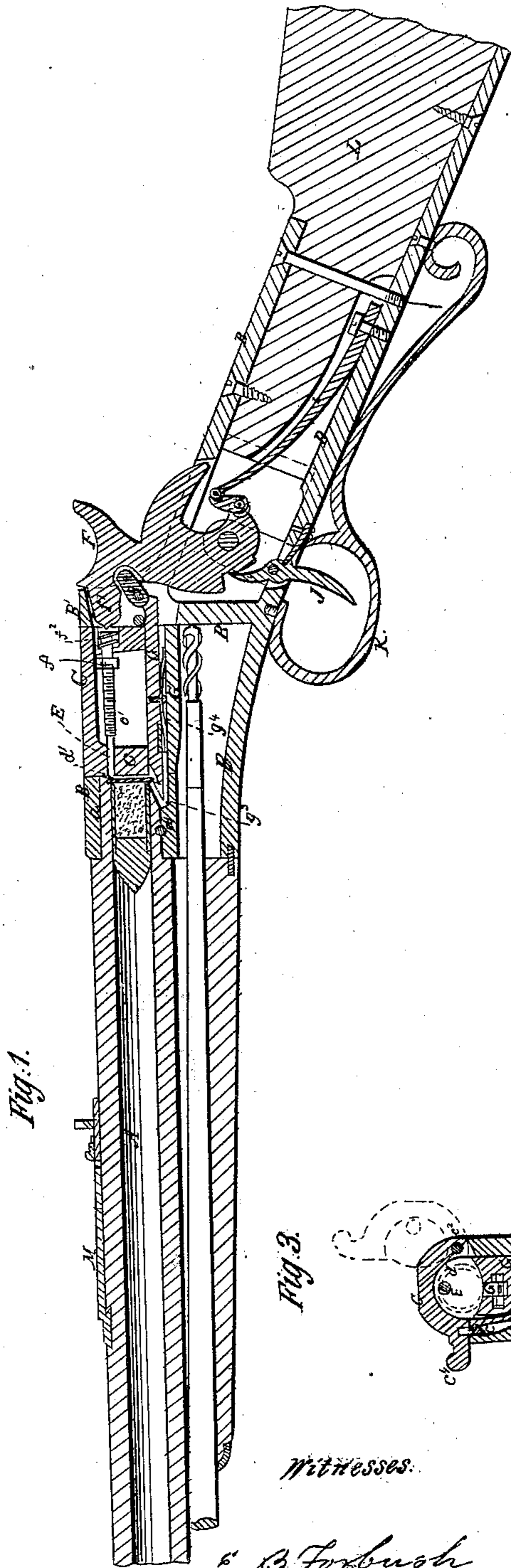


Fig. 1.

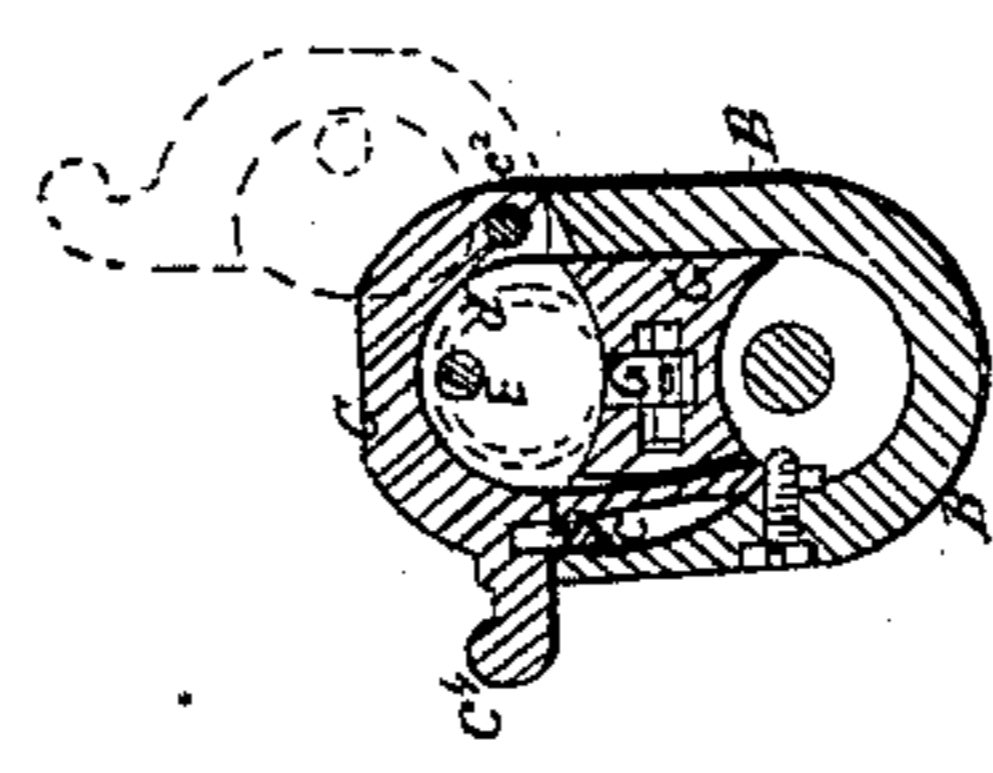


Fig. 3.

Witnesses.

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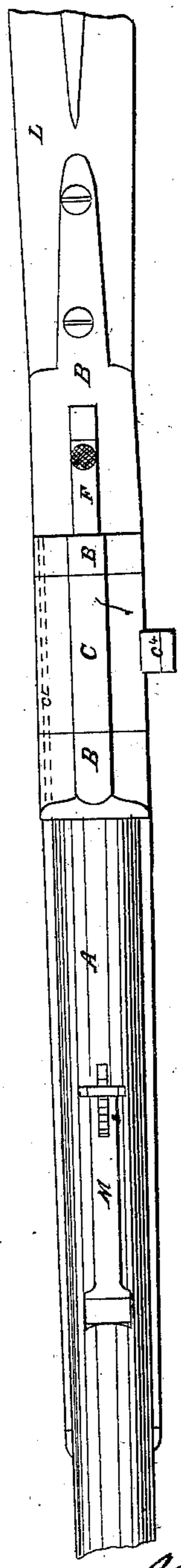


Fig. 2.

Inventor.
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JARVIS DAVIS, OF BUFFALO, NEW YORK, ASSIGNOR TO PATRICK SMITH,
OF SAME PLACE.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 39,198, dated July 7, 1863.

To all whom it may concern:

Be it known that I, JARVIS DAVIS, of the city of Buffalo, county of Erie, and State of New York, have invented certain new and useful Improvements in Breech-Loading Rifles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon, making a part of this specification, in which—

Figure I is a longitudinal section. Fig. II is a top plan, and Fig. III is a cross-section on line *x y*.

The nature of this invention relates, first, to the construction and use of a hinged abutment; second, in the construction and arrangement of a hooked bar connected to and operated by the hammer for withdrawing the discharged cartridge from the barrel, in combination with the hinged abutment.

Letters of like name and kind refer to like parts in each of the figures.

A represents the barrel of the rifle, the breech end of which is inserted, as shown at *a'*, in a casting, B, which forms an extension of the breech sufficient to receive a hinged abutment, C, and the working parts of the lock. It also serves to form a portion of the stock, and connects it (the stock) to the barrel.

C represents the hinged abutment. It is semi-cylindrical in form, and is chambered out, as shown at *c'*. It is hinged to the right side of the breech B, as shown at *c²*, and shuts down closely behind the barrel, and between it and a sub-abutment, B', in a manner to resist the recoil of the explosion. It is held down by the spring-catch *c³*, but is easily opened by pressing upward against the projecting thumb-piece *c⁴*. When it is thrown back, as represented by the dotted lines, Fig. III, the open end of the barrel is exposed, so that the cartridge may be readily inserted. Copper-cased cartridges must be used, and an annular rabbet is made in the end of the barrel for the reception of the flange of the cartridge which contains the fulminate, as shown at *d'*, so as to allow the abutment to shut down behind the cartridge. A sub-abutment, B', is formed by the breech-casting,

which gives an additional support and strength to the abutment to resist the recoil. A recess is made in this sub-abutment, through which the hammer enters to strike the head of the percussion-rod.

E represents a percussion-rod, which passes lengthwise through the upper side of the abutment C and its chamber *c'*, so as to come in line with the flange of the cartridge.

F represents the hammer, which is made to strike against the head of the percussion-rod through the sub-abutment, as shown at *f'*, and cause the rod to push forward, and, by striking the flange of the cartridge, ignite the fulminate and fire the charge. A spiral spring, *f²*, is placed around the percussion-rod in a recess behind the rod-head, to draw the rod back after being struck by the hammer. *f³* is a nut on the rod to prevent the spring from pushing it back too far.

G represents a hooked bar for withdrawing the case of the discharged cartridge. This bar lies in a grooved block, G', beneath the abutment, and is connected by a short link to the hammer H, as shown at *g²*. When the hammer is down, the hook comes directly in under the flange of the cartridge, a recess being made in the under side of the barrel, as shown at *g³*, to allow it to pass under. A spring, *g⁴*, is connected to the under side of the bar, and bears upon the bottom of the groove in the block G', so as to press upward upon the bar and cause its hook to catch in behind the flange of the cartridge, so that when the abutment is raised and the hammer drawn back the cartridge-case will be withdrawn from the barrel, and then, by a slight motion of the gun, it may be thrown away. When the abutment is shut down, it bears upon the hooked bar and presses it down, so that if the hammer is drawn while the abutment is down the hook cannot catch the flange of the cartridge, but passes by it, so that the gun may be readily cocked or uncocked while loaded without any action of the hook upon the cartridge.

I is the mainspring, J the trigger, and K the guard.

L represents the stock.

M represents the sight.

What I claim, and desire to secure by Letters Patent, is—

The hooked bar G, operated by the hammer, substantially as described, in combination with the grooved block G' and hinged abutment C, so that the hooked bar is thrown out of en-

gagement with the cartridge when the hinged abutment is closed, substantially as herein set forth.

JARVIS DAVIS.

Witnesses:

E. B. FORBUSH,
W. H. FORBUSH.