

(No Model.)

D. B. DUNCAN.
BREECH LOADING FIRE ARM.

No. 249,598.

Patented Nov. 15, 1881.

Fig. 1.

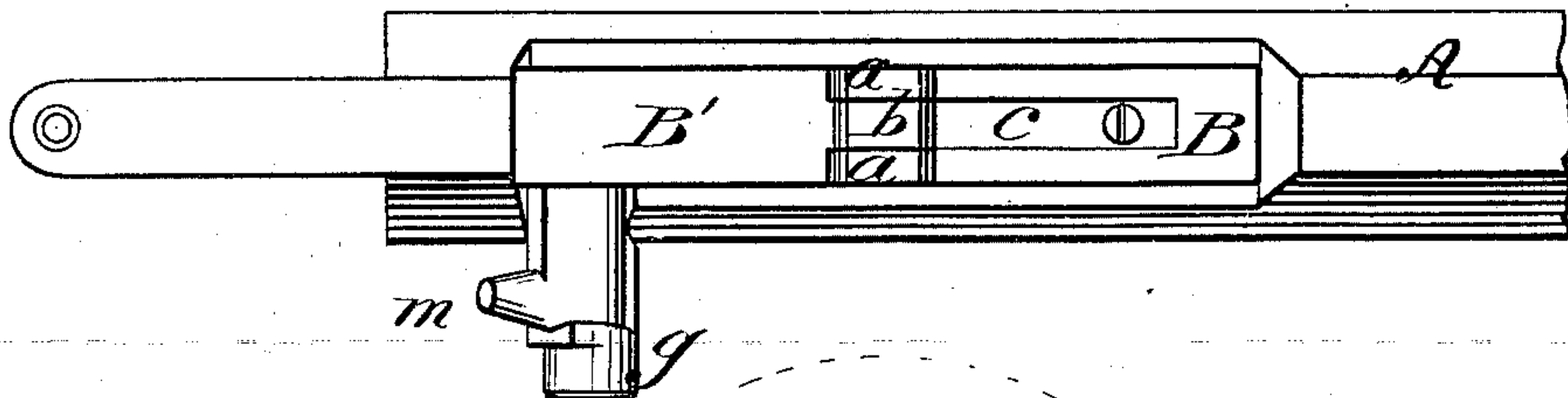


Fig. 2.

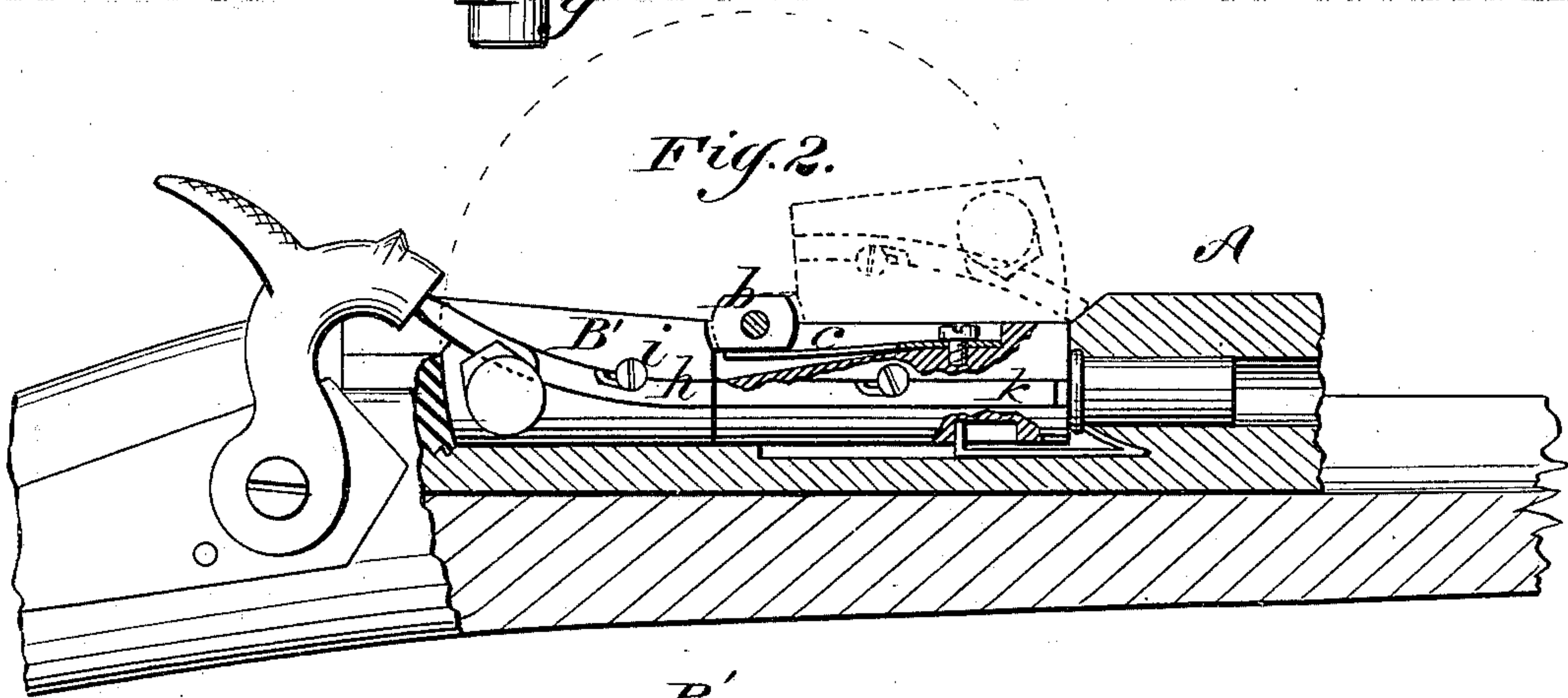


Fig. 3.

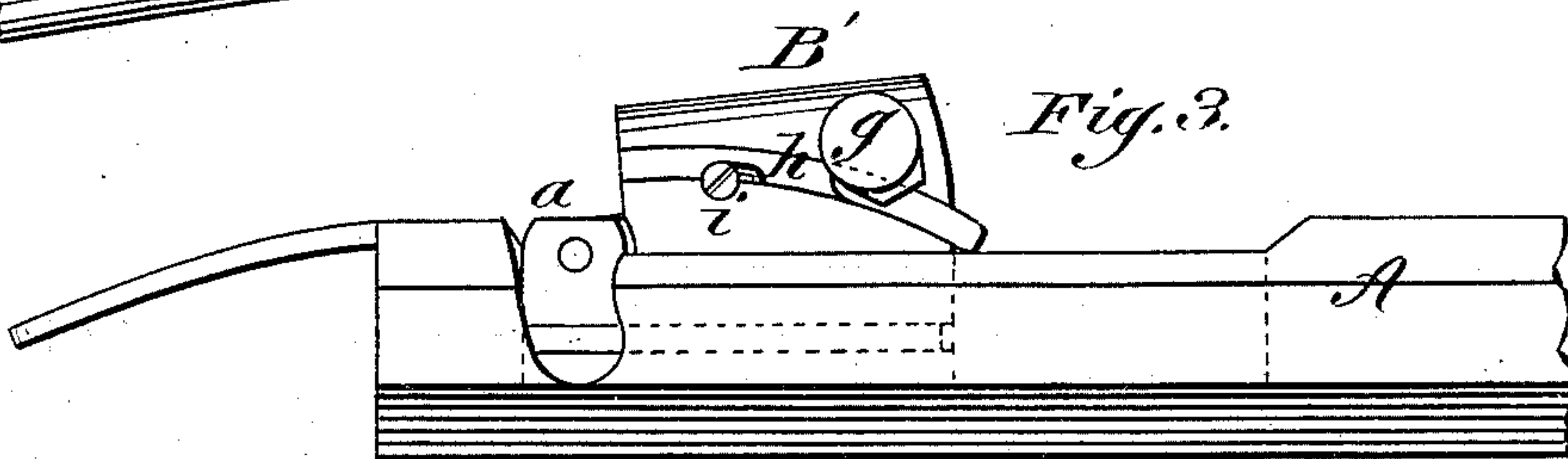


Fig. 4.

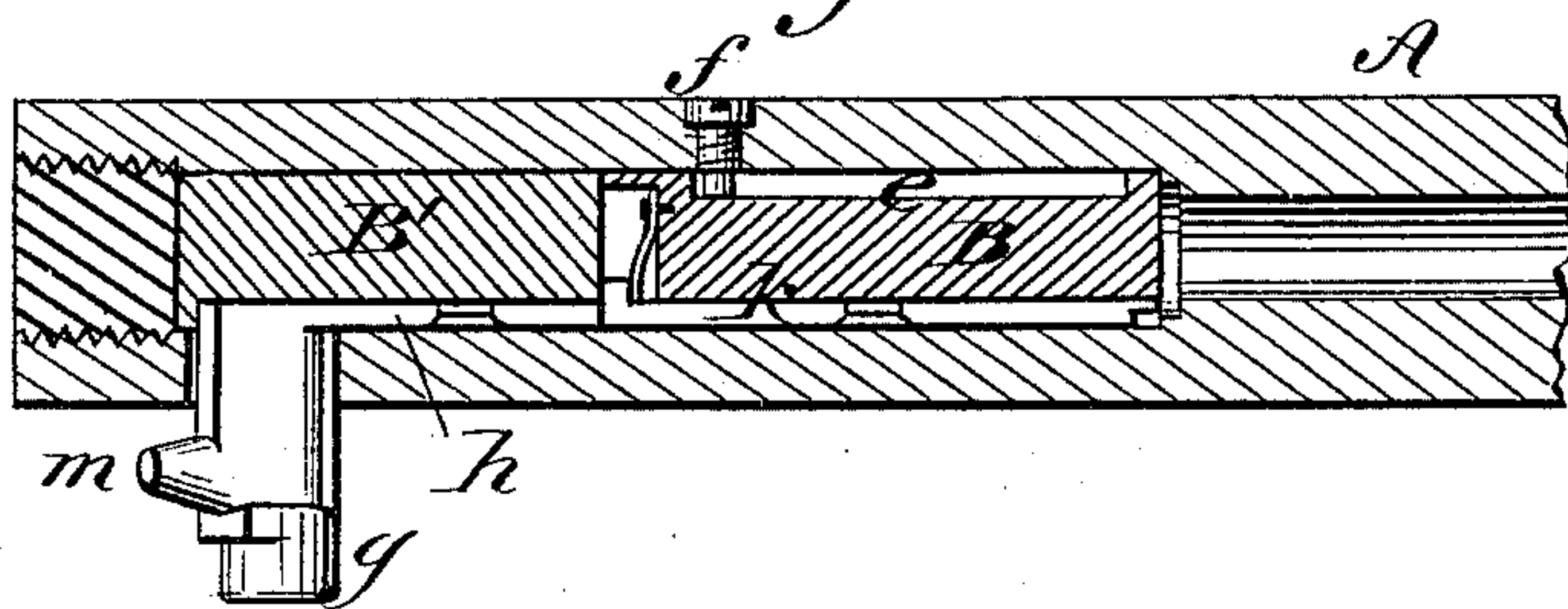
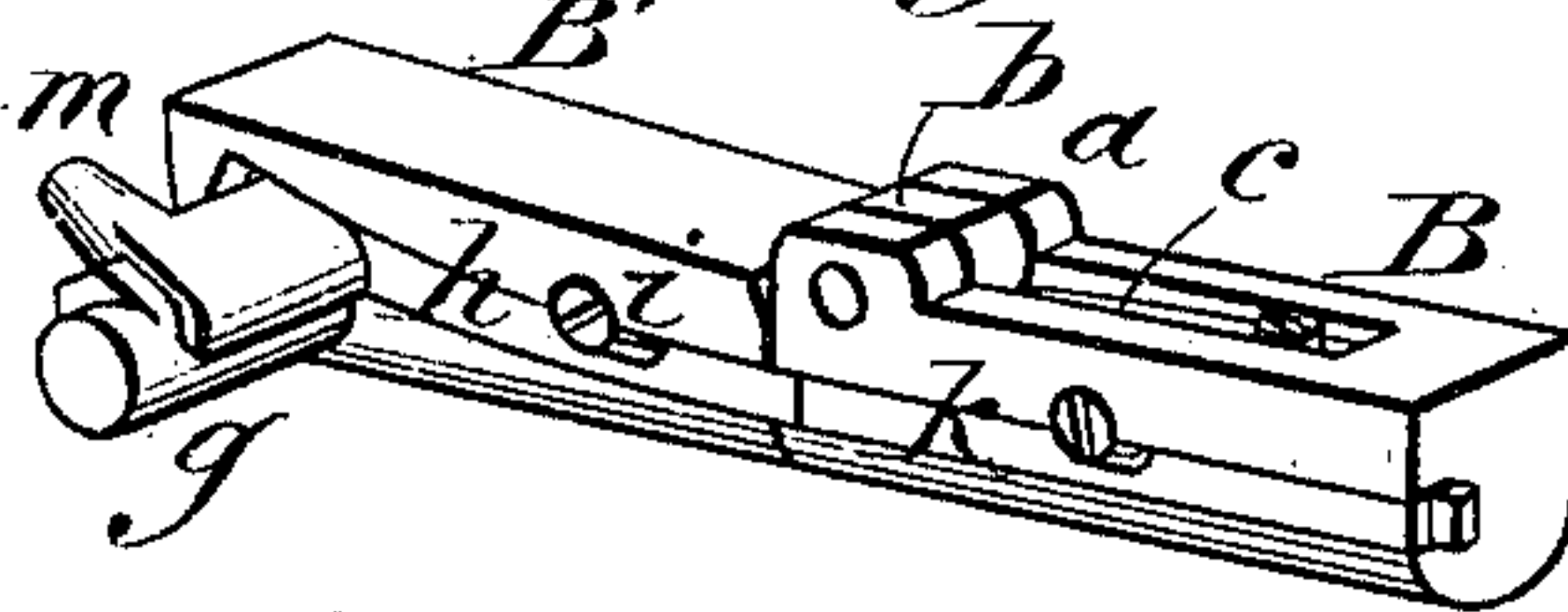


Fig. 5.

WITNESSES:

Donn J. Twitchell
C. Sedgwick



INVENTOR:

D. B. Duncan.
BY
Mum & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

DAVID B. DUNCAN, OF NEW RICHMOND, OHIO.

BREECH-LOADING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 249,598, dated November 15, 1881.

Application filed March 12, 1881. (No model.)

To all whom it may concern:

Be it known that I, DAVID B. DUNCAN, of New Richmond, in the county of Clermont and State of Ohio, have invented a new and useful
5 Improvement in Breech-Loading Fire-Arms, of which the following is a specification.

The object of my invention is to produce breech mechanism that can be readily applied to muzzle-loading guns without requiring special tools or skill.

The invention consists in a two-part breech-block fitted in a recess of the gun-barrel, so as to be swung upward and slide backward in opening the breech, as hereinafter described
15 and claimed.

In the drawings, Figure 1 is a plan view of the breech portion of a gun-barrel fitted with my improved mechanism. Fig. 2 is a sectional side elevation of the same with the breech closed. Fig. 3 is a side elevation with the breech open. Fig. 4 is a sectional plan view, and Fig. 5 is a perspective view of the breech-block detached.

Similar letters of reference indicate corresponding parts.

A is the barrel, having its bore at the breech end enlarged to a suitable size and for a suitable distance, and cut out on the upper side so as to form a recess for reception of the breech-block. The breech-block consists of the two portions B B', shaped to fit the recess in barrel A. The forward portion, B, is formed with lugs *a a* on its upper side, to which a tongue, *b*, on the rear portion, B', is attached by a cross-pin, so that the rear portion can be swung upward out of the recess, and space thus given for the block to slide backward. A flat spring, *c*, is fitted on block B and extends beneath tongue *b*, and the tongue has its upper and lower sides flattened, so that the spring tends to retain the block B' in position when in the recess, and also when turned outward upon block B. The forward block, B, is also fitted at its under side and forward end with a cartridge-extractor, *d*, consisting of a spring-hook which enters a recess formed for it in the forward abutment, so that its end shall take behind the flange of the shell. At one side of block B a groove, *e*, is formed, and a screw-pin, *f*, tapped in the side of the barrel enters the slot *e*. Block B is thus held down to place by the screw, and may slide endwise. The

rear block, B', is fitted at its rear end with a side projection or finger-piece, *g*, which extends through a slot formed in the barrel at the side of the breech-recess.

The piece *g* is for use in raising the rear block. It also carries in a dovetail recess the firing-nipple *m*, that is part of an angular extension of the firing-pin *h*, contained in a side groove of block B'. The pin *h* is curved in the direction of its length, and is held in its groove-seat by a screw, *i*. The block B is fitted with a pin, *k*, in a similar manner; but the pin is straight. A spring, *l*, Fig. 4, fitted at the outer end of block B, engages pin *k*, so as to retract the same. This construction provides for rim-firing cartridges. For center-firing cartridges the block B will be bored through the center to receive the firing-pin.

It will be seen that the breech-block, when in place, fills the space between the abutments, and the cartridge is held firmly against the force of explosion. To load the gun, block B' is raised and turned forward on block B, as shown by dotted lines in Fig. 2, and the blocks then slid back in the recess, as represented in Fig. 3. This action draws out the empty shell, which is then thrown out of the recess by turning the gun, and, the new cartridge being then put in, block B is moved forward and block B' turned back to place.

This mechanism combines strength, simplicity, ease of manipulation, and efficiency. Further, it can be readily applied to muzzle-loaders of any ordinary caliber. The breech mechanism being complete of itself, the gunsmith has only to bore and cut the gun out and place the block in the recess. No change is required in the lock or stock of the gun.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with the recessed barrel A, of the two blocks B B', hinged together at the top, having respectively the lugs *a* and tongue *b*, connected by cross-pin, the block B having the flat double-acting spring *c* and the spring-hook extractor *d*, the whole adapted to be used as described.

DAVID BOYLE DUNCAN.

Witnesses:

GEORGE A. PHIFER,
WILLIAM H. CLAYTON.