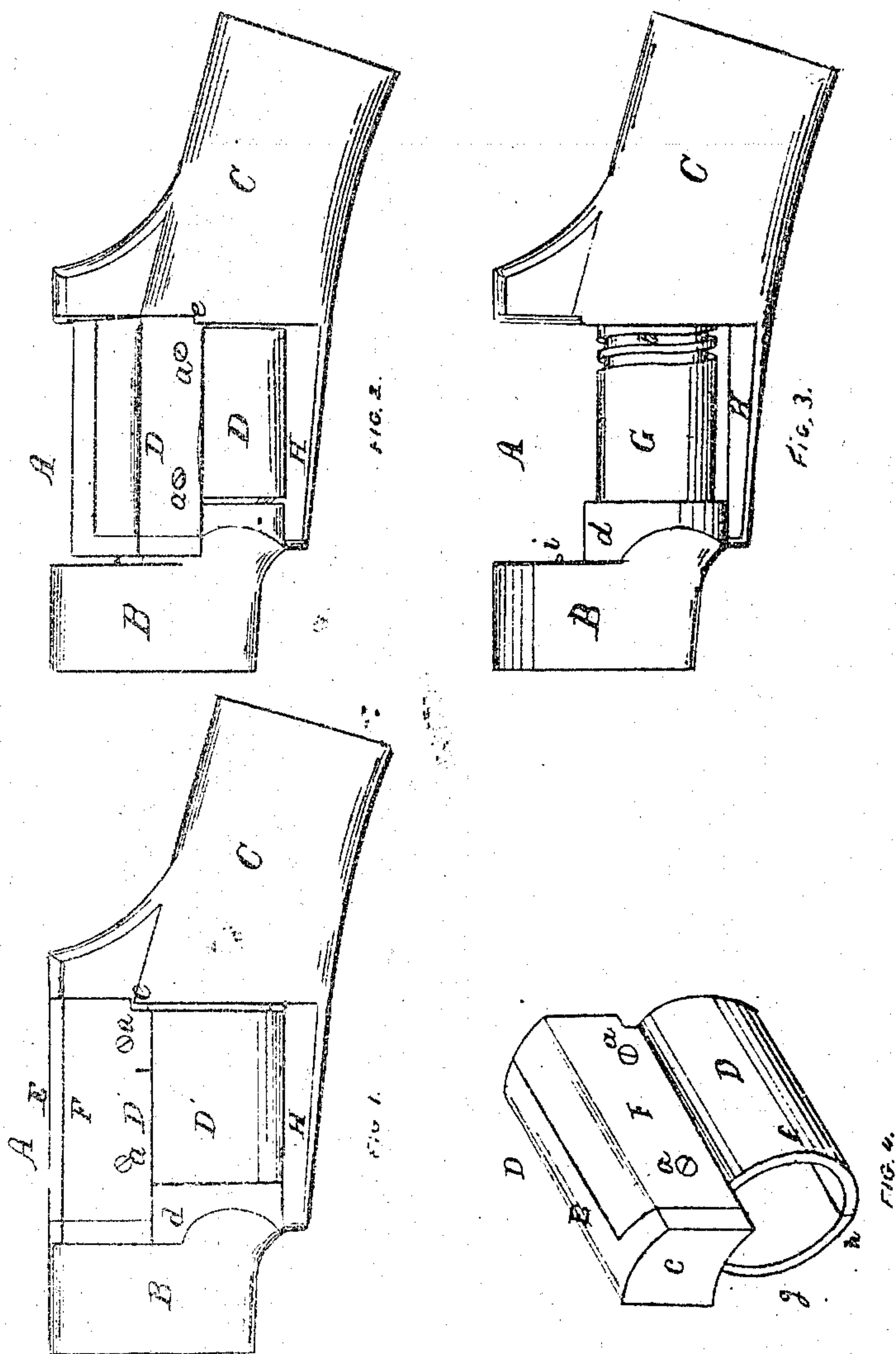


F. CLARK.  
Breech-loading Fire-arm.

No. 53,522.

Patented March 27, 1866.



WITNESSES.

*Thos. H. Budge*  
*H. C. Clark*

INVENTOR

*Francis Clark*



# UNITED STATES PATENT OFFICE.

FRANCIS CLARK, OF AUBURN, ASSIGNOR TO HIMSELF AND THOS. H. DODGE,  
OF WORCESTER, MASSACHUSETTS.

## IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 53,522, dated March 27, 1866.

*To all whom it may concern:*

Be it known that I, FRANCIS CLARK, of Auburn, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Breech-Loading Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a side view of so much of a breech-loading fire-arm as is necessary to illustrate my invention. Fig. 2 represents a similar view with the breech-block turned back, and Figs. 3 and 4 represent detached parts hereinafter to be referred to.

In the drawings, A represents the breech-piece. To the front part, B, the barrel is to be secured, while the stock is to be secured to the rear, C. The particular form of the front and rear parts, B and C, of the breech-piece A may be such as will suit the tastes of manufacturers.

The breech-block D is made in two parts, E and F, which parts may be fastened together by screws *a a*, or in any other proper manner. The breech-block D turns upon the neck G of the breech-piece A, and has a screw-thread cut upon the inner surface of its circular part D' to fit into a screw, *b*, on the neck G. The front end, *e*, of block D turns upon a shoulder, *d*, while the rear end of the block turns upon a shoulder, *c*.

H is a strap, which is fastened to the under side of the ends B and C to give them greater strength. The circular part D' of block D is in two parts, the part *f* being connected with part F, and the part *g* with the part E, the two parts meeting at the point *h*, thus making an expansible hinge for the block D.

*i* is a stop against which the block strikes, and its motion is stopped when in proper position to hold the cartridge in place.

The operation is as follows: Block D is turned one side, as indicated in Fig. 2, when the cartridge is inserted in the end of the barrel, which is fastened into the end of piece B. Block D is

then turned back into the position shown in Fig. 1, when its end *e* is brought close up against the end of the cartridge. It will be observed that the block D, when turned laterally, as shown in Fig. 2, is at the same time drawn back endwise by the action of screw *b* on neck G, and when it is turned back again it is moved forward by the same means. By this arrangement the rear end of the cartridge is held firm and secure in place, while the block is not liable to bind so as to prevent it from being readily turned laterally to remove the exploded shell. The circular part D' can expand readily, being open at *h*, and consequently is not liable to bind by the heating of the parts so as to interfere with the proper action of the whole when in use. By making the block D in two parts I am able to make the parts B, C, and G all in one piece, which for many reasons is advantageous.

The application of the lock, the mode of firing or exploding the charge, and removing the exploded shell being substantially the same as described in patents previously granted to me, no extended description of such mode of operation is here deemed necessary, since my present invention relates to the mode of construction and operation of block D and the parts connected therewith.

Having described my improvement in breech-loading fire-arms, what I claim therein as of my invention, and desire to secure by Letters Patent, is—

1. Making block D in two parts, substantially as set forth.
2. Making the circular part D' open, as at *h*, as and for the purposes set forth.
3. The combination of the parts E and F, substantially as set forth, whereby end *e* projects past the end of F, and prevents any joint in the block where it comes in contact with the rear of the cartridge.

FRANCIS CLARK.

Witnesses:

H. L. FULLER,  
THOS. H. DODGE.