G. T. ABBEY.

Breech Loader.

No. 87,814. Patented March 16, 1869.

FIG. 1.

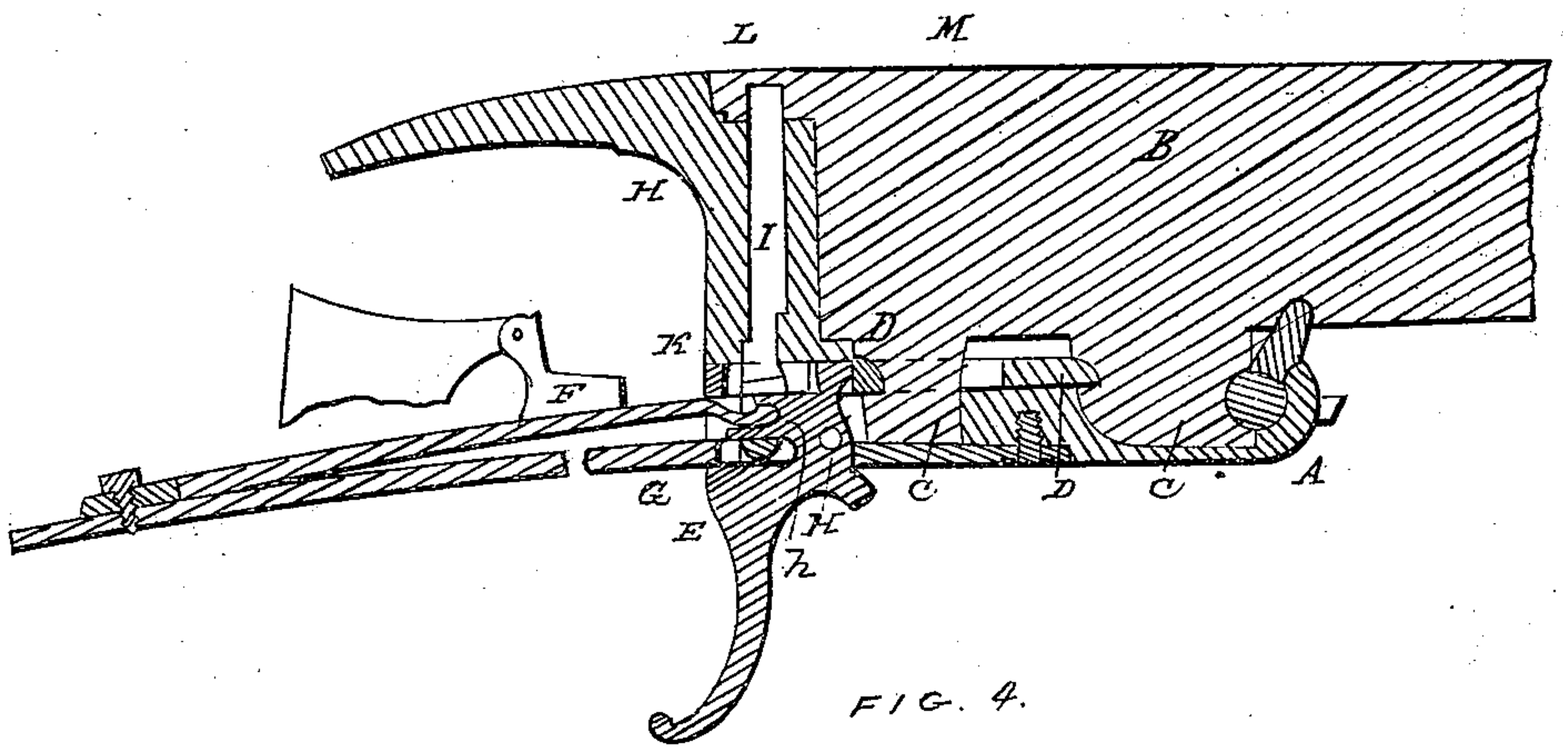

FIG. 4.

FIG. 2

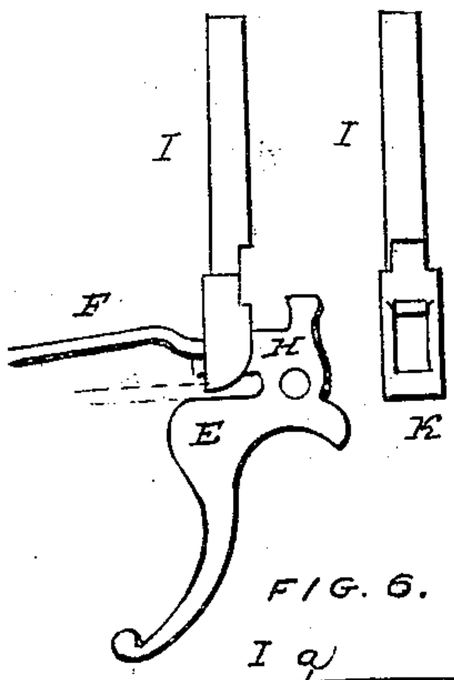

FIG. 3.

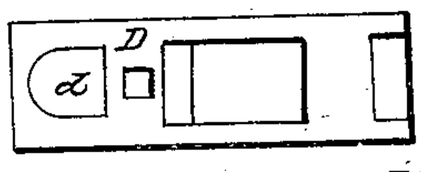

FIG. 5

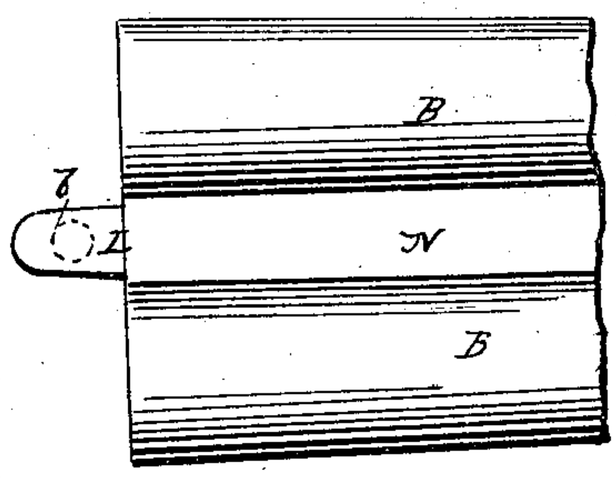

FIG. 6.

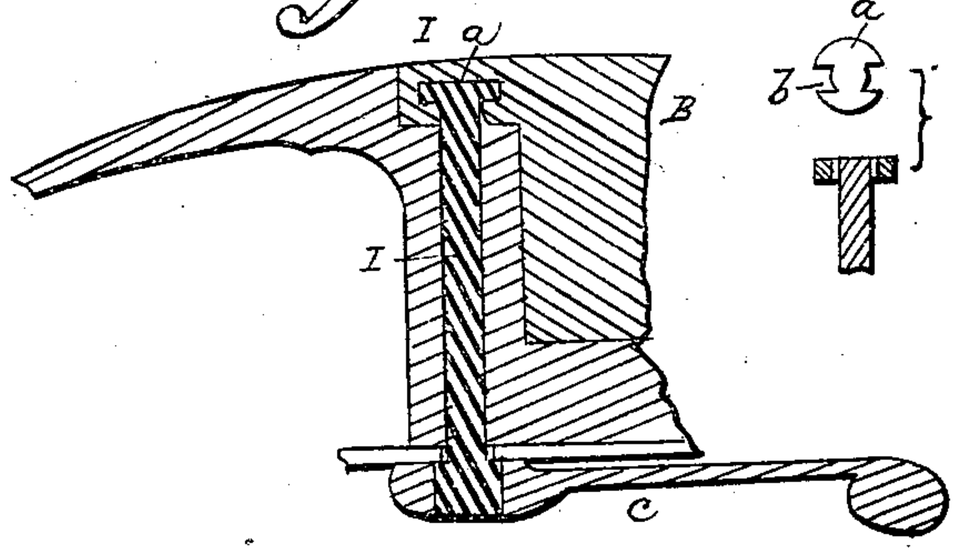

FIG. 7.

WITNESSES:

J. B. Turchin

G. A. Mariner

INVENTOR.

Geo. T. Abbey

United States Patent Office.

GEORGE T. ABBEY, OF CHICAGO, ILLINOIS.

Letters Patent No. 87,814, *dated March* 16, 1869.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE T. ABBEY, of the city of Chicago, in the county of Cook, and State of Illinois, have invented certain new and useful Improvements in "Breech-Loading Arms;" and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

Figure 1 represents a longitudinal section of the break-off and barrels of a breech-loading shot-gun.

Figure 2 is the side elevation, and

Figure 3 is the front elevation of the upright bolt.

Figure 4 is a top view of the horizontal bolt; and

Figure 5 is the top view of the extension of the rib of the barrels.

Figures 6 and 7 represent another arrangement of the upright bolt and rib's extension.

My invention, having an object to perfect the present means of fastening the barrel to the breech-piece, or break-off, of breech-loading arms generally, and of the sporting arms particularly,

Its nature consists in an upright bolt, placed in the break-off, and so constructed and combined with a horizontal bolt, now used to fasten the barrel to the break-off, that by the action of the same lever which operates the horizontal bolt, the said upright bolt is also operated, thereby locking into an extension of the upper part of the barrel or rib, and securing the barrel to the break-off at the top of the gun perfectly. Or, if desirable, the upright bolt alone, without the horizontal bolt, can be used for the purpose of securing the barrel to the break-off at the top of the gun only.

The accompanying drawing represents my improvement as applied to the double-barrelled breech-loading shot-gun, the same to be applied substantially in a similar manner to other breech-loading arms.

A is the breech-piece, or break-off.

B, the barrels.

C C, the lugs, into which locks the horizontal bolt D, operated by the lever E, in connection with spring F, one end of which is secured to the trigger-plate G, and the other end placed into the notch *h* of the short arm H of the lever E.

I is the upright bolt, cut off squarely at the top, and rounded or bevelled in front at the bottom, and provided with an opening, or slit, K. It is placed vertically in the break-off A, its foot passing through an opening made in the trigger-plate G, and resting on that part of the long arm of the lever E which buts against the trigger-plate, while its top is locked into the extension L of the rib M of the barrels, provided with a cup, *l*, to receive the said top of the bolt I.

The opening K has the purpose of receiving the notched part of the arm H of the lever E, and the end of the spring F resting in the notch *h*, so that when lever E is operated, the notched part of its arm H operates the bolt I vertically.

Horizontal bolt D is provided with an opening, *d*, through which bolt I passes, said opening being of a sufficient size not to interfere with the movements of the bolt I, so that when the horizontal bolt D is in place, and the lever E is operated, it performs a double function, viz, one consisting in locking the bolt D into the lug C C, and the other in locking the bolt I into the cup *l* of the extension L of the barrels, thus securing the barrels to the break-off at the bottom and at the top of the gun at the same time.

The extension L of the rib may be made in one piece with the barrels, or may be made separately, for the purpose of having it thoroughly hardened.

If desirable, the upright bolt alone can be used to fasten the barrels to the break-off, without using the horizontal bolt at all.

The above-described mode of fastening the barrel to the break-off, by means of an upright bolt locking into an extension of the rib or barrel, is preferred by me to other modes, which might produce the same result; and, in order to point out that there may be found other ways of accomplishing the object, I will describe one of them as an example.

The vertical bolt I may be provided with a round head, *a*, in which notches *b b* are cut out, and the bolt, instead of being operated vertically, is turned round on its centre by means of the lever *c*.

The extension L is provided with a slit, *l*, so arranged as to correspond to the shape of the head *a* of the bolt, so that when the extension L is brought down, and the head *a* of the bolt enters the slit *l* of the extension, by operating lever *c* one-quarter round, the head of the bolt locks in the slit of the extension L.

Having thus fully described my invention,

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

1. The vertical bolt I, located in the breech-piece A, and arranged to engage with the projection L of the barrels, for the purpose of locking the parts together, substantially as described.

2. The combination of the locking-bolts I and D, with the thumb-piece E, for operating the same, all constructed and arranged to operate substantially as set forth.

GEO. T. ABBEY.

Witnesses:

J. B. TURCHIN,

N. K. KROEBER.