

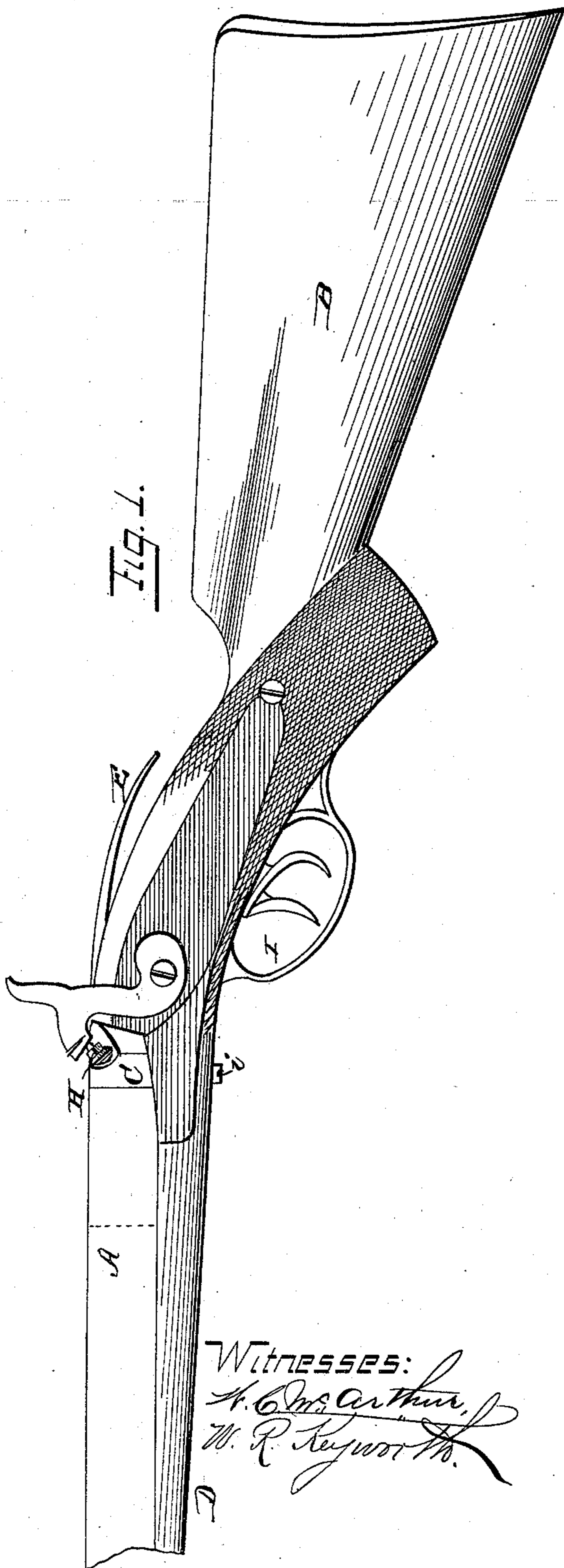
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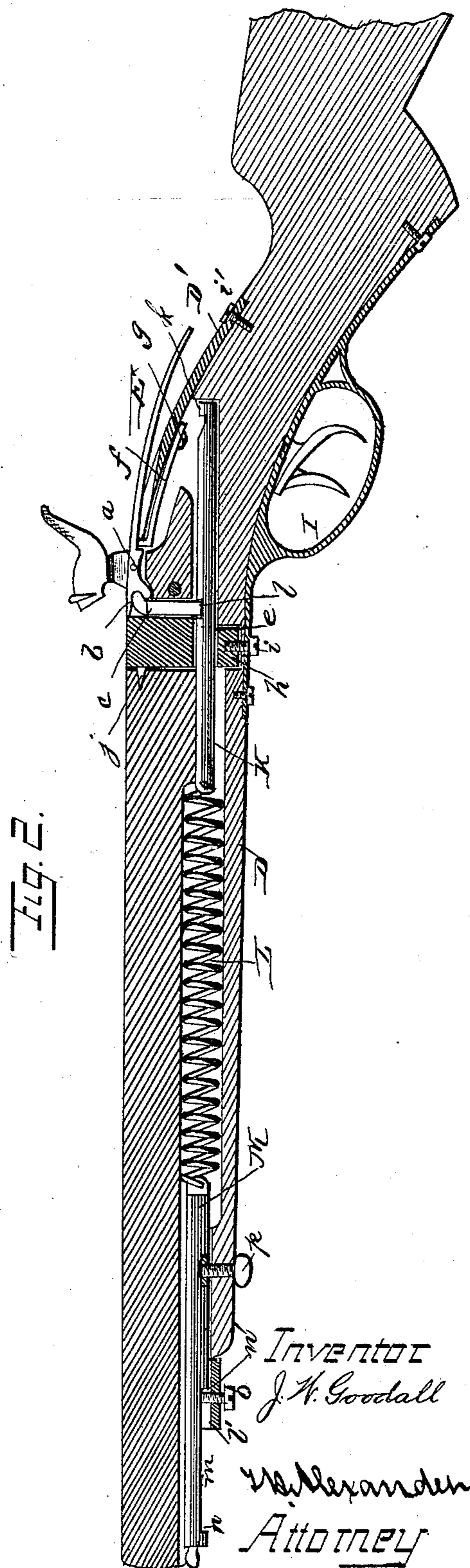
J. W. GOODALL.  
BREECH LOADING FIRE ARM.

No. 258,051.

Patented May 16, 1882.



Witnesses:  
H. C. Arthur.  
W. R. Keyser, Jr.



*Inventor*  
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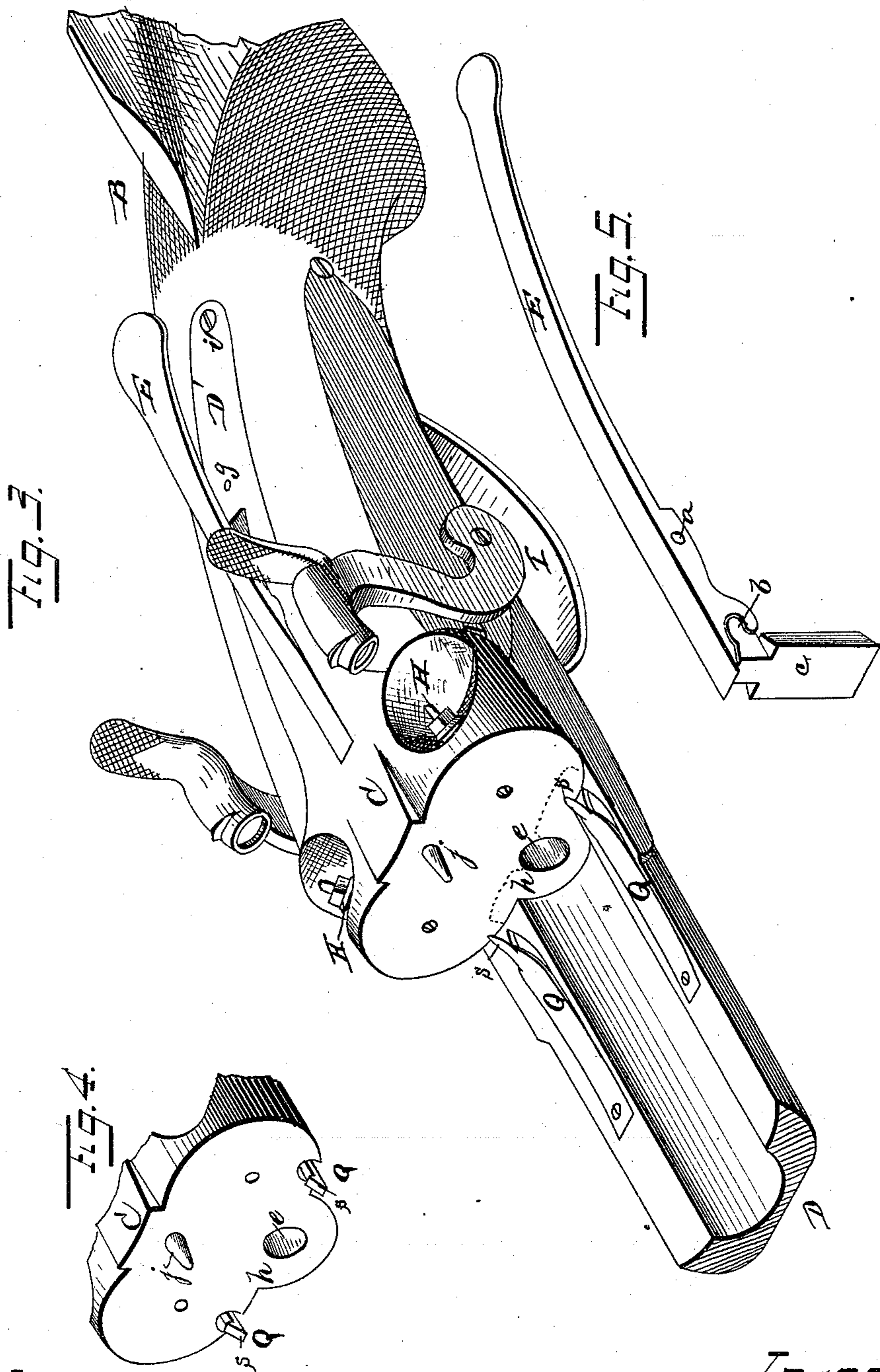
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J. W. GOODALL.  
BREECH LOADING FIRE ARM.

No. 258,051.

Patented May 16, 1882.



Witnesses:

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# UNITED STATES PATENT OFFICE.

JOHN W. GOODALL, OF HAYES, KANSAS.

## BREECH-LOADING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 258,051, dated May 16, 1882.

Application filed January 30, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. GOODALL, of Hayes, in the State of Kansas, have invented certain new and useful Improvements in the Means of Converting Muzzle-Loading to Breech-Loading Guns; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a side view of the improved gun. Fig. 2 is a longitudinal section. Fig. 3 is a perspective view of the breech-block and its attachments to the stock, portions of which are broken away. This view also shows spring-extractors applied to the extension of the stock. Fig. 4 is a perspective view, showing extractors applied to the breech-block. Fig. 5 is a detail view, showing the latch.

This invention relates to improvements which are applicable to side-arms; and the nature of my invention consists in certain means, hereinafter explained, whereby muzzle-loading shot-guns and rifles can be readily converted into breech-loaders, having combined with them extractors for the cartridge-shells.

The following description of my invention will enable others skilled in the art to fully understand my invention.

The drawings represent my invention applied to a double-barrel smooth-bore gun; but I contemplate its application to a single-barrel smooth-bore gun or to a rifle.

A designates the barrels, B the stock, and C the breech-block.

D designates the well-known extension of the stock and a forward support for the gun-barrel.

In order to carry my invention into effect, I take a muzzle-loader and cut off the hook at the break. This break now becomes a breech-block. The tang D' is suitably slotted to receive a thumb-piece or key, E, which is pivoted at *a* to the tang D', and which is provided on its forward end with a free or knuckle joint, *b*. With this joint is connected a latch, *c*, which is dovetailed in guides formed in the breech-block posterior to an eye, *e*. A spring, *f*, acts on the thumb-piece E in rear of the pivot *a*, which spring is rigidly fixed to the tang of the breech-block by a screw, *g*. The cap-nipples

are removed and the well-known center-fire pins are inserted in their places, as indicated by the letters H H. A loop or eye-piece, *h*, is welded or otherwise rigidly secured to the breech-block, through which eye is tapped a screw, *i*, which is intended to secure the forward portion of the trigger-guard I to the breech-block. The rear part of this guard I is secured to the pistol-grip in the usual manner. The tang of the breech-block is secured to the neck of the stock by a screw, *i'*. It will be seen that the breech-block is secured below to the extension of the stock, and that it is secured by its tang to the neck of the stock. These two attachments afford rigid security for the breech-block, and the latter attachment, *i'*, becomes a brace for bringing the breech-block snugly and solidly home against the shoulder of the stock.

The hammers and their locks may be constructed in the usual well-known manner. The conical centering-pin *j*, (shown in Figs. 2, 3, and 4,) is inserted in its proper place in the breech-block, for the purpose of causing the barrels to register properly with the back sight, and to bring their longitudinal axes in proper position with respect to the lower termini of the firing-pins.

To the web between the barrels, at the breech end thereof, I rigidly secure a rod, K, which has a shoulder, *k*, near its rear end, and a transverse notch, *l*, near the breech end of the barrels. The front end of this rod K has an eye formed in it, which receives one end of a helical spring, L, the opposite end of which spring is attached to an eye formed through a rod, M, which is guided by a loop, *l'*, secured rigidly to the two barrels in the median line thereof. The rod M is flattened at *m*, which leaves two shoulders, *n n'*, and the loop *l'* receives through it a screw, *o*, which forms an abutment for the shoulders. In rear of the shoulders *n'* the rod M is screw-tapped to receive a thumb-screw, *p*, which is loosely passed through the metal tip on the extension D of the stock. By thus applying the spring L it acts to move the barrels away from the breech-block far enough to allow the insertion of the cartridges into the barrels. The distance between the shoulders *n n'*, which are at the termini of the flattened portion of the rod M, is such that the barrels are allowed to spring

back a little after they are shot forward, thereby preventing undue straining of the spring L.

The notch *l* in the rod K is intended to receive the latch *c*, and to hold the barrels in their places ready for firing, as shown in Fig. 5

2. After firing the piece the finger is applied to the key E and the latch raised free from the notch *l*, which movement allows spring L to move the barrels forward until they are arrested by the shoulder *k*, at the rear end of the rod K, engaging with the said latch *c*. This latch thus serves the double purpose of holding the barrels when they are closed against the breech-block, and also for arresting the barrels (when they are freed from the latch and allowed to spring forward) at or near the forward end of the stroke.

Fig. 3 shows two cartridge-extractors, Q Q, which are springs having pointed rear ends, 20 s s. These extractors are secured to the forward extension of the stock, and they are recessed into said extension, as shown.

Fig. 4 shows extractors applied to the breech-

block. I have described my invention applied to a double-barrel piece; but I contemplate its application to a single-barrel piece. 25

Having described my invention, I claim—

1. The combination, with a breech-block having a loop or eye, *h*, and a catch, *c*, of the rod K, rigidly secured to the barrels, and provided with a transverse notch and a shoulder to receive the latch *c* and limit the movement of the barrels, substantially as described. 30

2. The combination of the rod K, the spring L, the barrels A, the notched and shouldered rod M, the breech-block provided with a loop, *h*, and a catch for retaining the barrels in contact with the breech-block, substantially as described. 35

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses. 40

JOHN W. GOODALL.

Witnesses:

W. C. MCARTHUR,  
T. H. ALEXANDER.