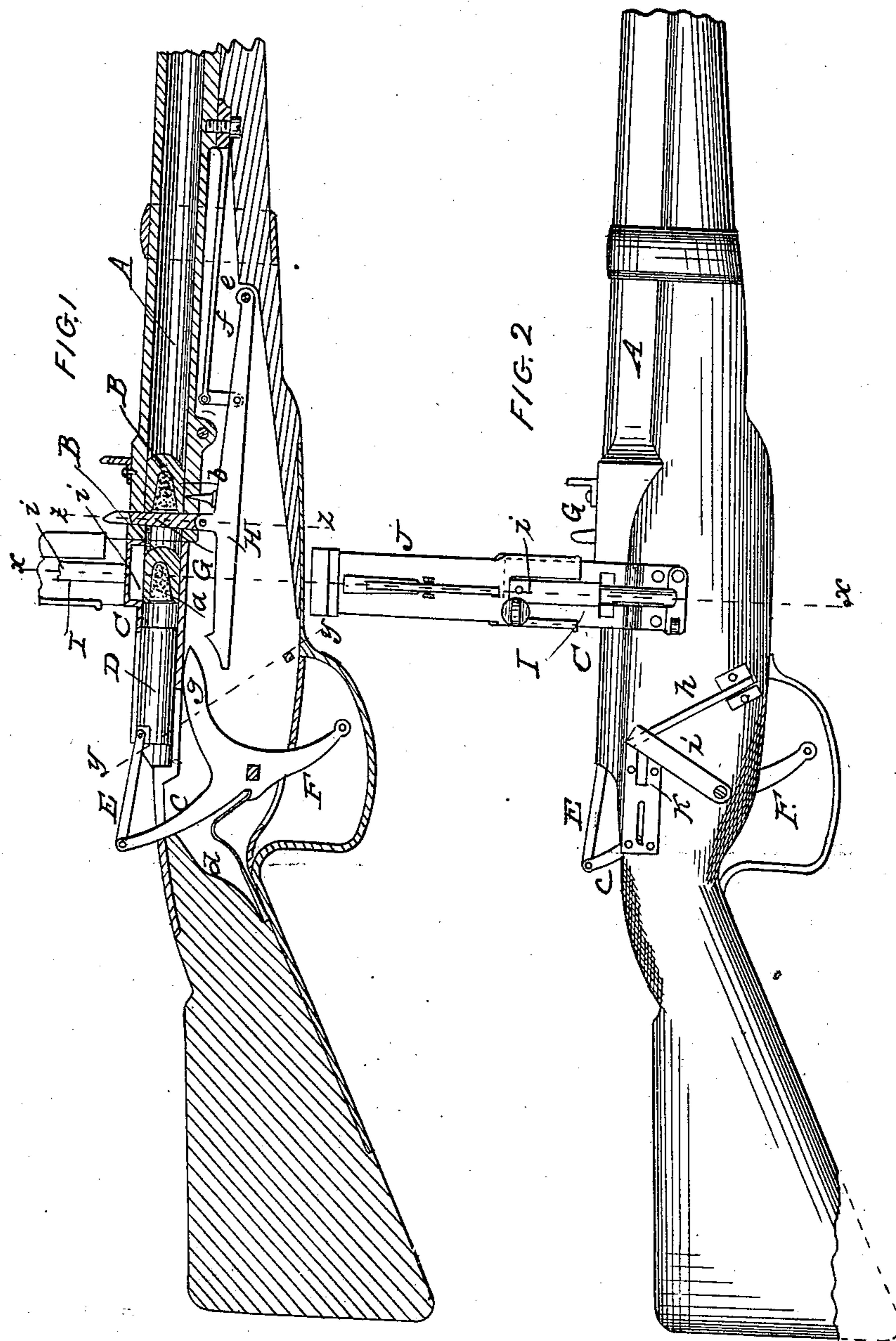


F. V. DIAZ.

Breech Loading Fire Arm.

No. 94,577.

Patented Sept. 7, 1869.



WITNESSES
C. F. Kaskinbaker
L. Wahler

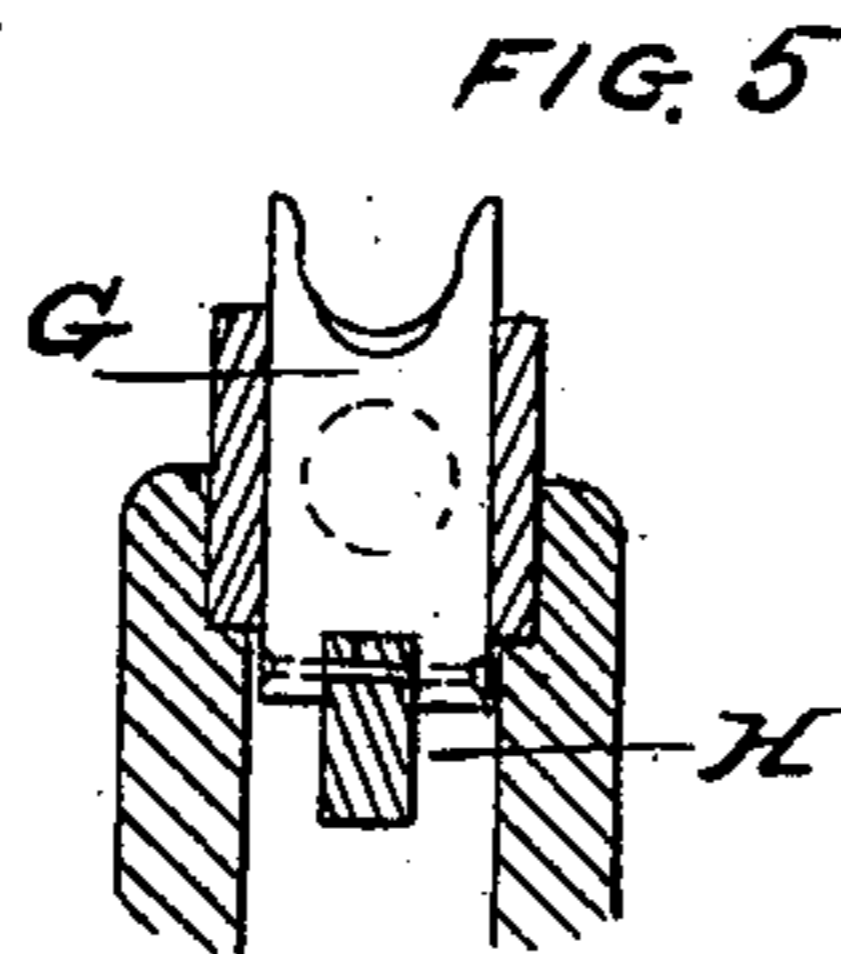
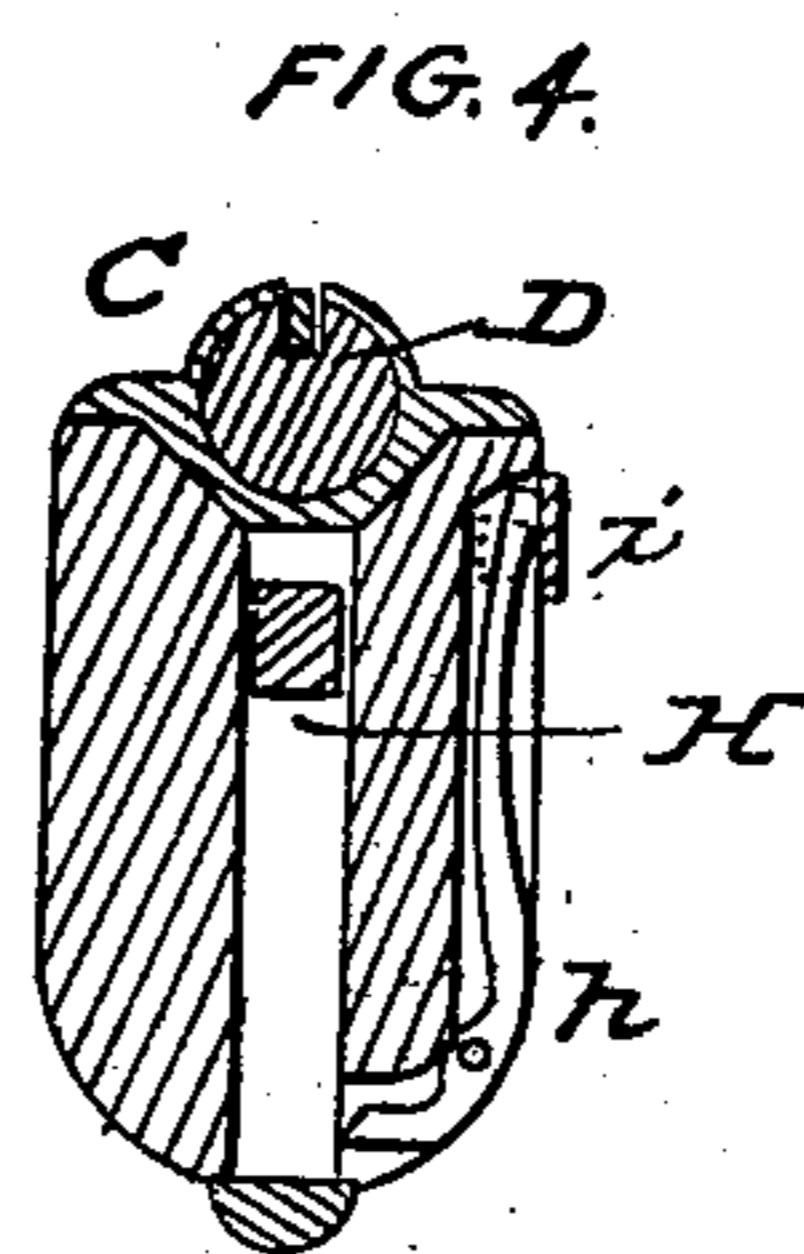
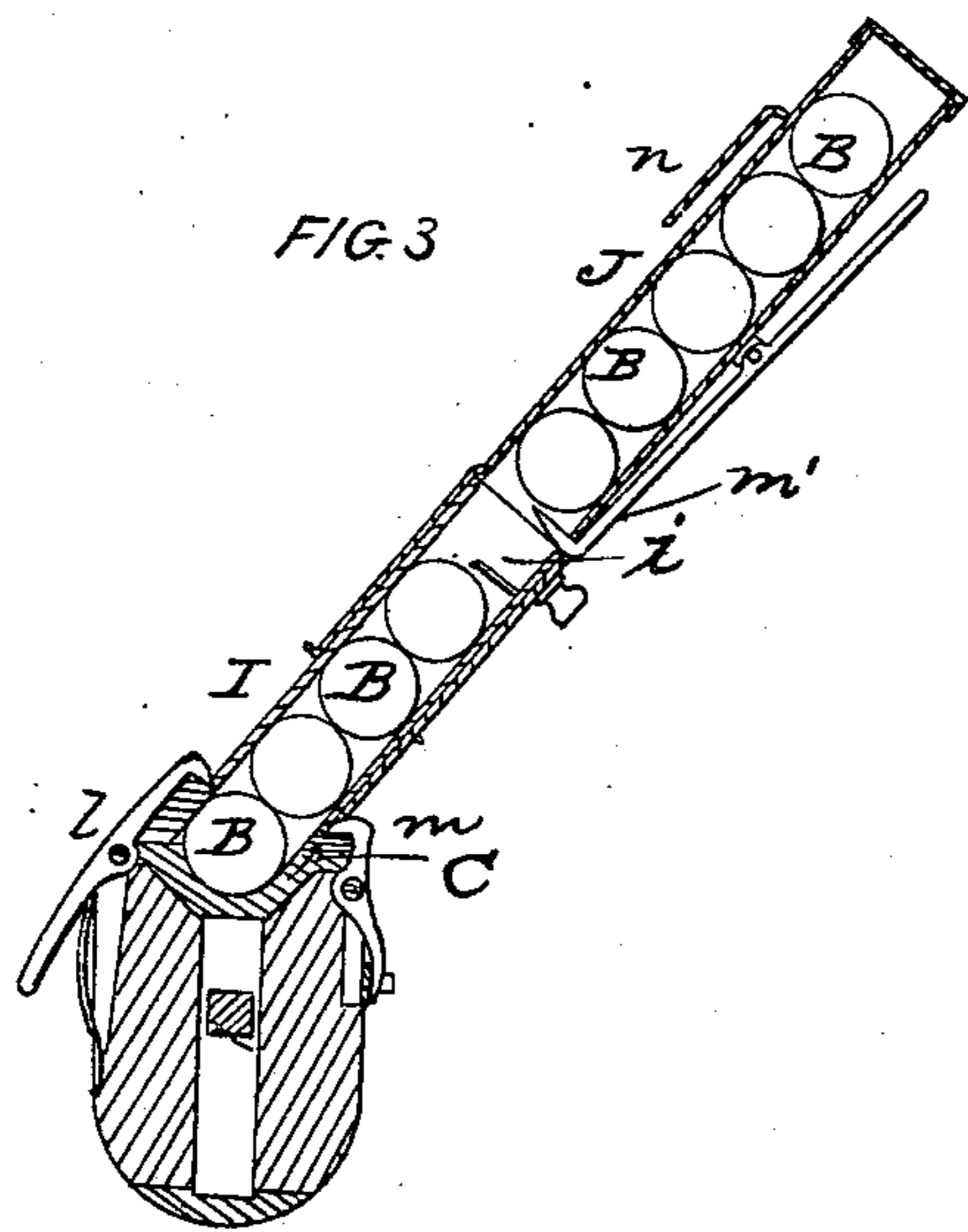
INVENTOR
F. V. Diaz
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WITNESSES
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UNITED STATES PATENT OFFICE.

FAUSTINO VALDES DIAZ, OF NEW YORK, N. Y.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 94,577, dated September 7, 1869.

To all whom it may concern:

Be it known that I, FAUSTINO VALDES DIAZ, of the city, county, and State of New York, have invented a new and useful Improvement in Breech-Loading Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a longitudinal central section of this invention. Fig. 2 is a side elevation of the same. Fig. 3 is a transverse section of the same, the line xx , Fig. 1, indicating the plane of section. Fig. 4 is a similar section of the same, taken in the plane indicated by the line yy , Fig. 1. Fig. 5 is a similar section of the same, in the plane indicated by the line zz , Fig. 1.

Similar letters indicate corresponding parts.

This invention relates to a breech-loading fire-arm in which projectiles are dropped into the breech through an opening in its top, and they are pushed into the chamber by means of a plunger, which is connected to and operated by the trigger. Said trigger also acts on a lever, which carries the firing-pin and a gate or movable recoil-shield, and as the trigger is pulled back the recoil-shield is drawn down to admit the projectile into the chamber, and by releasing the trigger the recoil-shield is carried back to its original position, and the firing-pin strikes the fulminate of the projectile and the charge is exploded.

The firing-pin and recoil-shield lever, after having been depressed by the action of the trigger, is retained by a spring-catch, so that the trigger is allowed to recede in advance of said lever, and said lever is carried up by the action of its spring with sufficient force to explode the charge.

With the open breech is combined a magazine, which can be attached and detached at pleasure, and which is capable of containing a series of projectiles, which drop down in succession into the breech, so that a number of shots can be fired in quick succession.

A series of supplementary magazines, which are suspended from a belt around the body of the rifleman, is so constructed that they can be readily attached to the main magazine, and

thereby the introduction of a fresh supply of projectiles into said main magazine is materially facilitated.

In the drawings, the letter A designates a barrel of a breech-loader, to which the projectiles B are admitted through an opening in the top of the breech C.

The projectiles are each provided with a cavity, a , to receive the requisite quantity of powder, and with a groove, b , to receive a belt of fulminate, and they are pushed into the chamber of the barrel by means of a plunger, D. This plunger connects by a pitman-rod, E, with an arm, c , projecting from the body of the trigger F, and a spring, d , which acts on the trigger, carries the same, together with the plunger, back to its original position.

The chamber of the barrel is closed at its rear end by a gate or movable recoil-shield, G, which is hinged to a lever, H, situated under the barrel A. This lever has its fulcrum on a pivot, e , and it is subjected to the action of a powerful spring, f , which has a tendency to carry the same up to the position shown in Fig. 1 of the drawing.

The lever H is depressed by a toe, g , which projects from the body of the trigger F, and this toe or arm begins to act on the lever before the plunger D acts on the projectile in the breech, so that the recoil-shield is drawn down in time to admit the projectile into the chamber.

When the lever H is depressed to its lowest position it is caught by a spring-catch, h . (Best seen in Figs. 2 and 4.) This spring-catch is situated on the side of the stock, and it receives a positive motion in either direction by an arm, i , which is secured to the end of the fulcrum of the trigger, and partakes of the motion of said trigger. When the trigger is pulled back the arm i is carried down, and the point of the catch h passes over the edge of the lever H, and retains the same until the trigger recedes and the arm i has reached the upper part of the spring-catch, when, by the action of said arm, the spring-catch is released and the lever H left free to follow the action of its spring f .

From the lever H projects a firing-pin, j , and as said lever rises the pin is carried through a hole in the barrel and brought in contact with the belt of fulminate on the pro-

jectile. The fulminate is exploded, and the fire thus produced is communicated to the charge in the cavity of the projectile. By arresting the lever H and allowing the trigger to recede in advance of the same the spring *f* is permitted to impart to the firing-pin the requisite force to explode the fulminate without fail.

When the trigger is pulled back the spring-catch *h* can be arrested by a bolt, *k*, let into the side of the stock, and the fire-arm is brought to half-cock, the lever H being firmly retained in position until the bolt *k* is drawn back and the spring-catch is released.

With the breech C, I have combined a magazine, I, which can be readily attached to or detached from the stock, as may be desired.

In the drawing, Fig. 3, I have shown two hooks, *l m*, which catch over lips at the bottom edge of the magazine; but it is obvious that different ways for fastening the magazine can be devised, and I do not wish to confine myself to the particular construction shown.

Said magazine is capable of holding four or more projectiles, and it is provided with a spring-hook, *l'*, which can be forced into said magazine, so as to prevent the projectiles from rolling out when the fire-arm is laid down, or turned so as to bring the magazine in an inverted position.

With the magazine I, I have combined a series of supplementary magazines, J, each capable of holding ten or more cartridges, and provided with retaining spring-stops *m'*. These supplementary magazines are so constructed that they can be slipped, one after the other, over the top end of the main magazine, and by pressing on the tail of the spring-stop the contents of the supplementary maga-

zine are allowed to discharge into the main magazine. Said supplementary magazines are provided with hooks *n*, so that they can be readily attached to a body-belt, and thus the rifleman is enabled to carry, conveniently, a large number of such supplementary magazines. By this arrangement the rifleman is enabled to carry a large number of projectiles, and the supplementary magazines can be almost instantaneously attached to the main magazine, so that an almost unlimited number of shots can be fired in quick succession.

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

1. The spring-lever H, carrying the movable recoil-shield and the firing-pin, in combination with the trigger, all constructed and operating substantially as shown and described.
2. The spring-catch *h*, in combination with the lever H and the arm *i*, substantially as described.
3. The detachable magazine I, as arranged with the plunger, the trigger, and the lever H, all constructed and operating substantially as shown and described.
4. The bolt *k*, in combination with the catch *h*, lever H, and arm *i*, substantially as set forth.
5. The combination and arrangement of supplementary magazine J, main magazine I, the plunger, the trigger, and the lever H, all constructed and operating substantially as set forth.

FAUSTINO VALDES DIAZ.

Witnesses:

W. HAUFF,
C. WAHLERS.