

F. JONES.

Breech-Loading Fire-Arm.

Patented Oct. 2. 1860

No 30.228

Fig. 2.

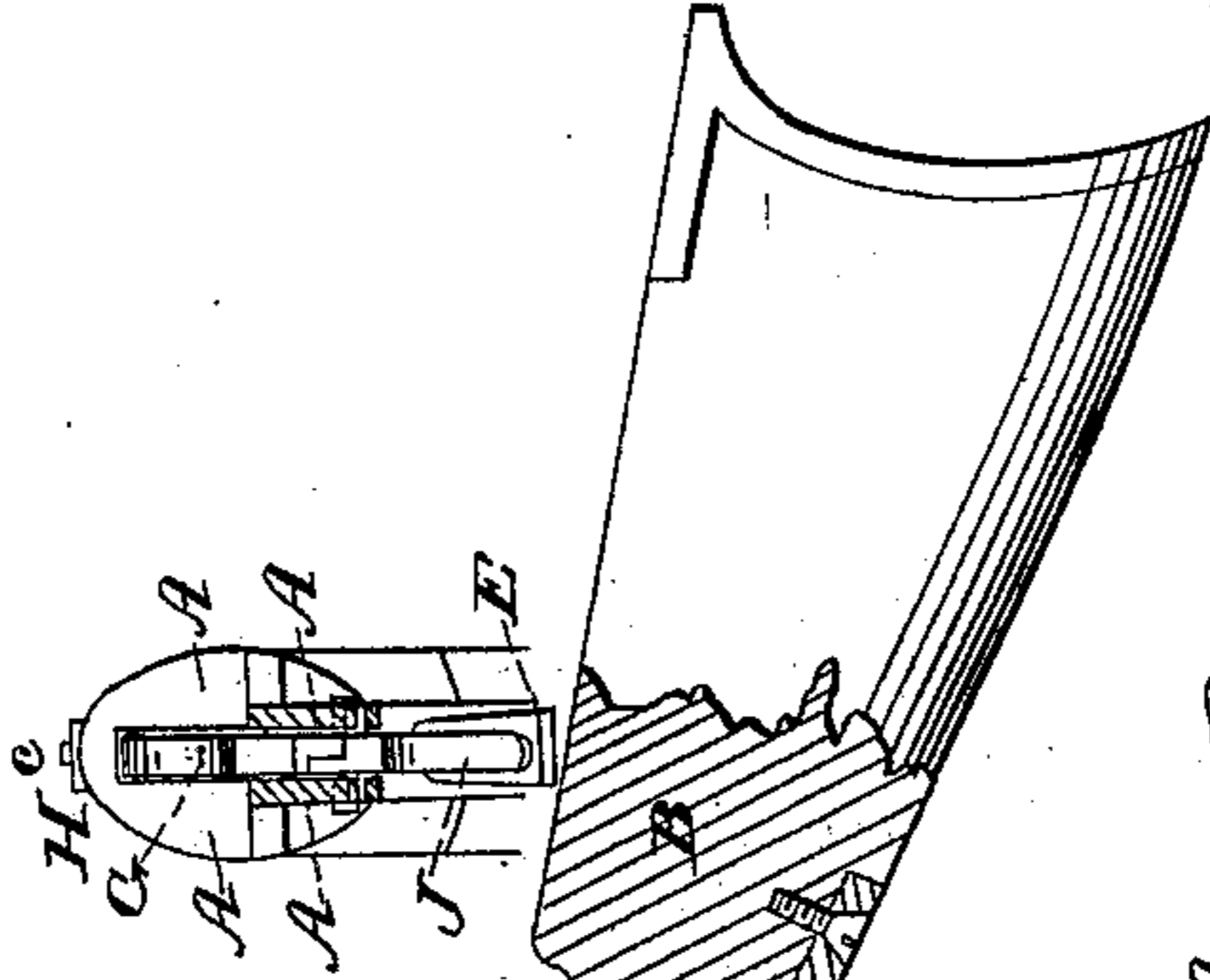


Fig. 1.

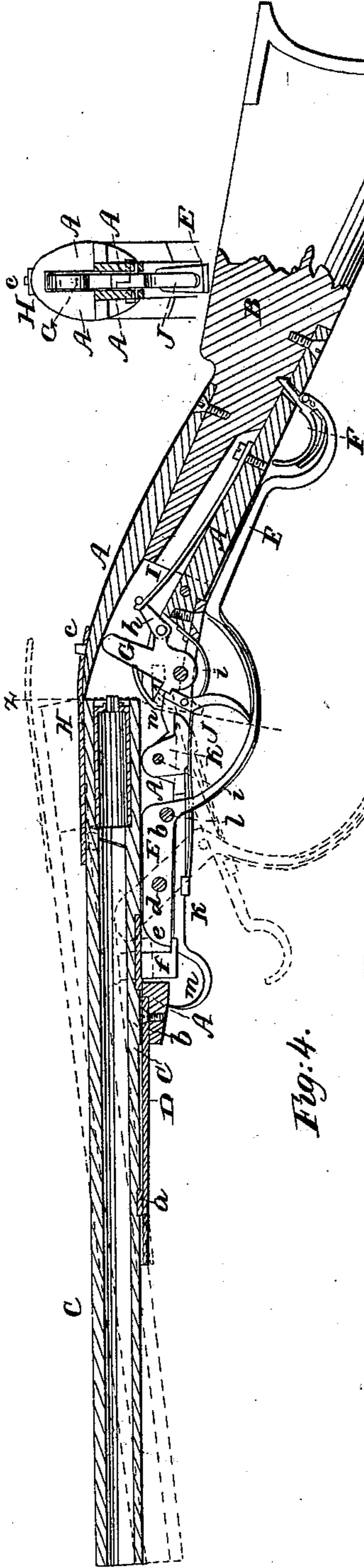


Fig. 3.

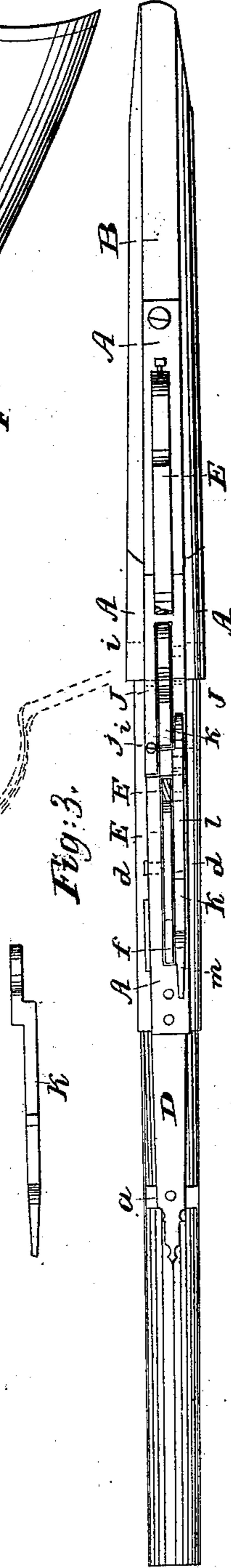


Fig. 4.



Witnesses
J. W. Combs
R. S. Spencer

Inventor:
F. Jones
per Munnell &
attorneys

UNITED STATES PATENT OFFICE.

FREDRICK JONAS, OF McCONNELL'S GROVE, ILLINOIS.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 30,228, dated October 2, 1860.

To all whom it may concern:

Be it known that I, FREDRICK JONAS, of McConnell's Grove, in the county of Stephenson and State of Illinois, 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 part of this specification, in which—

Figure 1 is a central longitudinal section of a breech-loading gun with my improvements. Fig. 2 is a transverse section of the same in the plane indicated by the line *x*, Fig. 1. Fig. 3 is an under side view of the same. Fig. 4 is an under side view of the cocking-lever detached.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to that class of breech-loading fire-arms whose barrel is raised at the breech end for the introduction of the charge in a forward direction.

It consists, principally, in certain means of cocking the hammer, either independently of the opening of the breech or by the act of opening the breech by a trigger-guard lever applied for the purpose.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is the metal frame of the gun, to which the stock B and the barrel C are secured, and which contains and has attached to it all the parts of the lock. The principal connection of the barrel with the frame A consists of a strong spring, D, which is secured to the bottom of the barrel, at about the middle of its length, by a dovetail, *a*, and secured to the frame A, near its front end, by a screw, *b*. This spring in its normal condition is straight, or nearly so, and tends to keep the barrel in position for firing, as shown in black outline in Fig. 1; but it is capable of bending to allow the rear end or breech of the barrel to rise, as shown in red outline in the same figure. The connection of the barrel with the frame is completed, when the breech is closed, by means of a stout steel catch, H, which is secured permanently to the top of the barrel, and which contains a hole to hitch onto a fixed pin or projection, *c*, on the top of the frame A. The barrel is held down to the frame A, when the le-

ver E is close under the said frame, by the forward end of the said lever bearing upon a stout hook, *f*, that is attached rigidly to the barrel.

E is a trigger-guard lever working through a slot provided in the bottom of the front portion of the frame A, which extends some distance under the barrel.

d is the fulcrum-pin on which the said lever works, inserted through the slot. The front portion of this lever E has a rounded or cam-like form, as shown at *e*, in order that by the act of drawing down the rear end from the frame A it may act against the bottom of the barrel to raise up the rear end or breech to a position for loading, as shown in red outline in Fig. 1. The rear portion of the lever is formed with a bow to receive one of the fingers or the thumb of the right hand, and within the said bow there is arranged the finger-piece of a small spring-catch, F, by which the lever is locked against the frame at all times, but during the opening, loading, and closing of the breech.

The barrel A is made with an opening right through the rear, and I propose to place the charge in a cup fitted to an enlarged chamber formed by counterboring the rear portion of the barrel, the bore of the said cup being slightly larger than the bore of the barrel. This cup, which is represented in Fig. 1 in blue color, has the vent in its closed rear end. The cup is taken out to be charged, and replaced in the barrel when charged.

G is the hammer, arranged entirely within the frame A and working on a pin, *g*.

I is the mainspring, connected with the hammer by a stirrup, *h*.

J is the trigger, and *i* the trigger-spring.

K is the cocking-lever, arranged to work on a fulcrum-pin, *j*, passing transversely through the slot of the frame A, through which the lever E works. This lever K is so bent, as shown in Figs. 3 and 4, that though its rear portion works in the slot in the bottom of the frame A the greater portion of its length is on one side of the trigger-guard lever, as shown in Fig. 2, and under a pin, *k*, which is secured to and projects from one side of the latter lever. The said lever K has a spring, *l*, attached to its front part and projecting rearward beyond its fulcrum-pin, *j*, as shown in Figs. 1 and 3, to press under the frame A in

such a manner as to hold up the said lever close under the frame, as shown in black outline in Fig. 1, when the lever E is close up to the frame. The front end of the said lever has formed upon it a hook, *m*, or it may be formed in such other manner as to enable it to be easily taken hold of and drawn down by hand when it is desired to cock the hammer independently of the trigger-guard lever E. The lever K cocks the hammer by the action of its rear end on an arm, *n*, which projects in a forward direction from the hammer. The drawing down of the trigger-guard lever to raise the breech for loading causes the pin *k* to press downward the front portion, and so raise the rear portion of the lever K against the arm *n*, and by throwing up the said arm *n* to effect the cocking of the hammer. The trigger-guard lever in raising the breech and cocking the hammer moves so far that it will keep the breech raised till it (the lever) is raised up by hand again, and when this is done the spring D brings down the barrel again to its seat in the frame A, and the catch H drops into the projection *c* and locks the barrel, and at the same time the spring *l* throws back the lever K to its position close under the frame A, as shown in Fig. 1 in black outline. When the lever K is pulled down separately to cock the

hammer without moving the breech, the gun having been previously loaded, the said lever operates upon the hammer, in the same manner as above described, without disturbing the barrel.

I do not claim the arrangement of the barrel so that its rear end shall be capable of swinging upward to expose the breech for loading, nor the raising of the barrel by means of a trigger-guard lever; but

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

1. The connection of the barrel C with the frame A by means of a spring, D, applied as described, to serve both as a flexible joint and as a means of returning the barrel to its position for firing, substantially as herein described.

2. The arrangement of the cocking-lever K in combination with the trigger-guard lever E, substantially as herein described, to provide for the operation of the said lever K either by or independently of the trigger-guard lever.

FREDRICK JONAS.

Witnesses:

R. B. MOORE,
E. S. HAMLIN.