

A. BURGESS.
MAGAZINE FIRE ARM.

No. 290,394.

Patented Dec. 18, 1883.

Fig: 1.

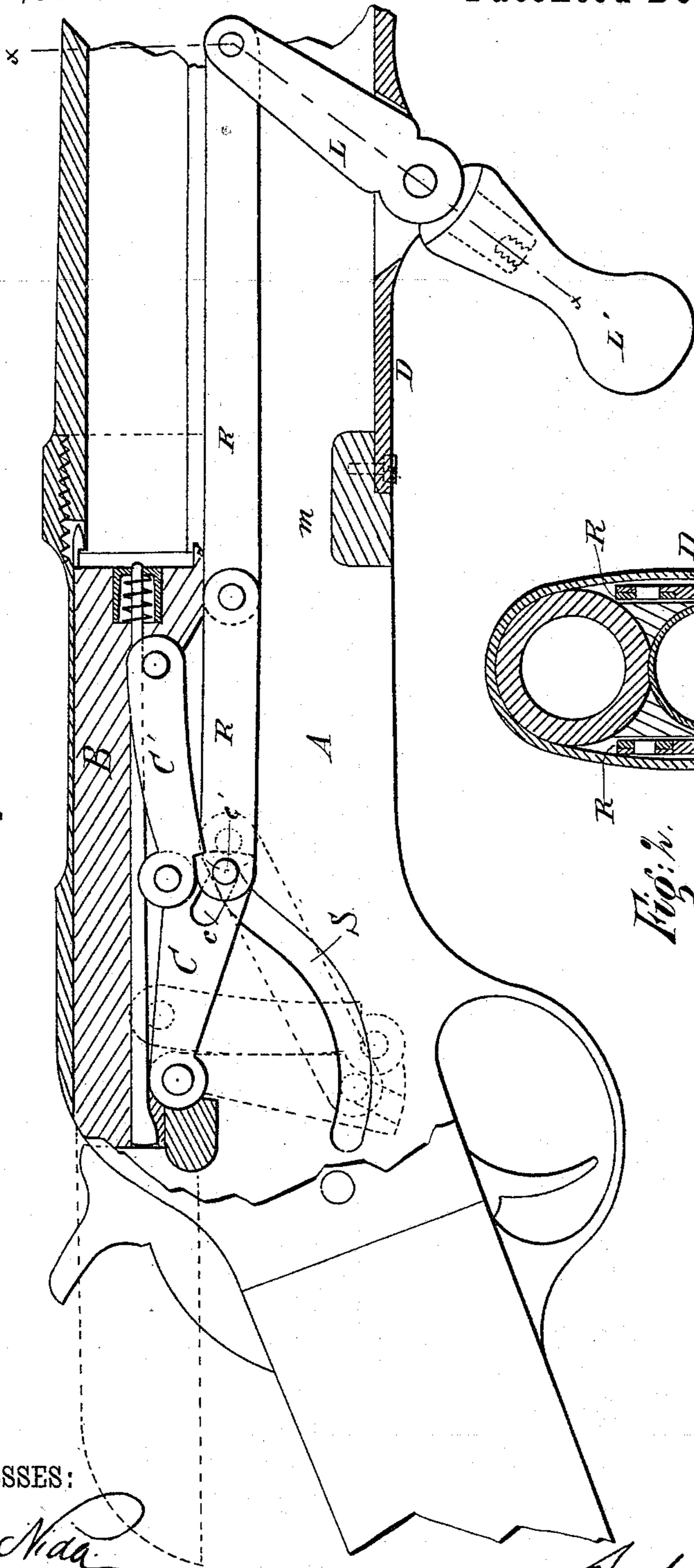
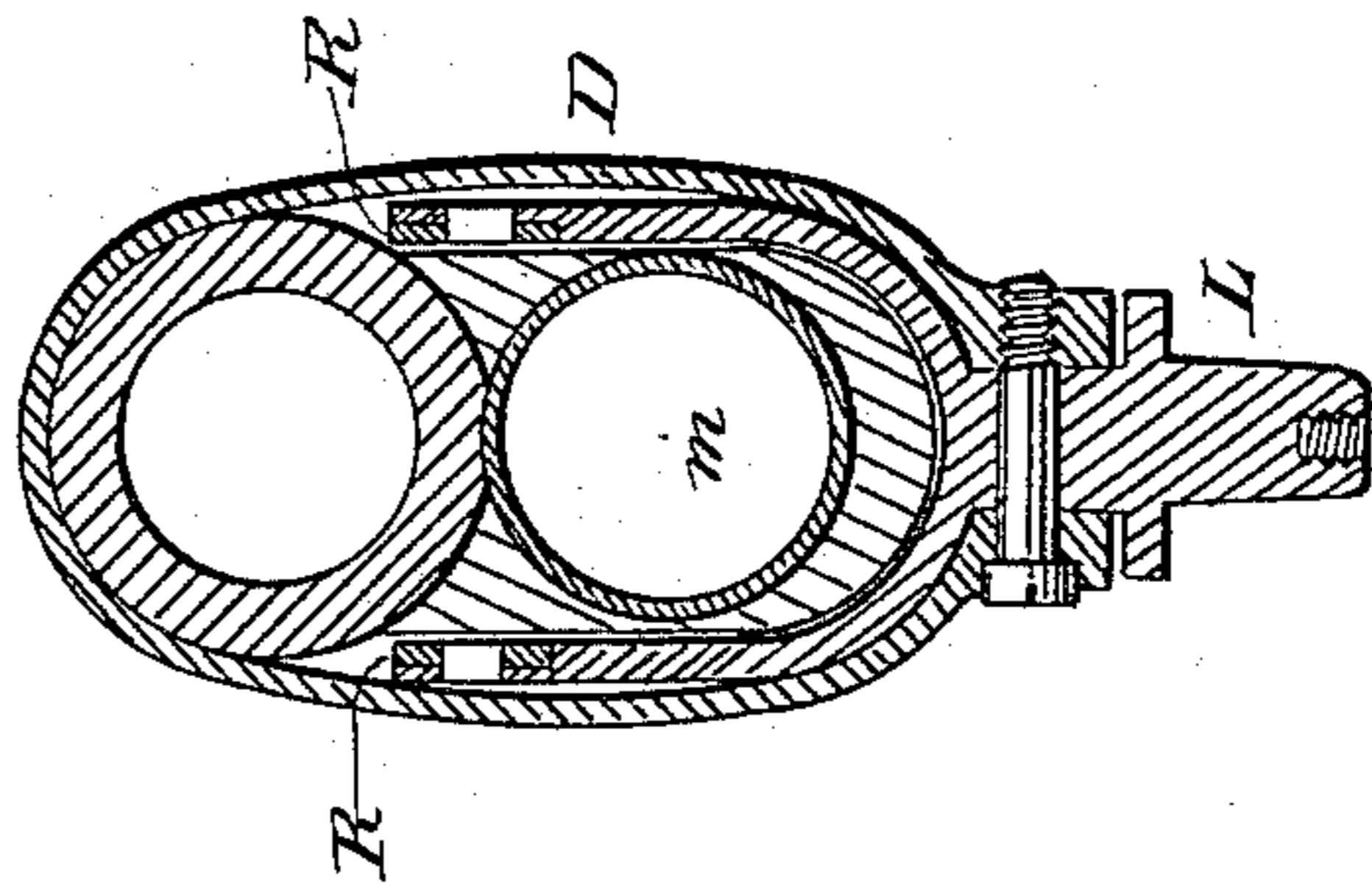


Fig: 2.



WITNESSES:

Chas. Nida
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INVENTOR

Andrew Burgess

(No Model.)

2 Sheets—Sheet 2.

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Fig: 3.

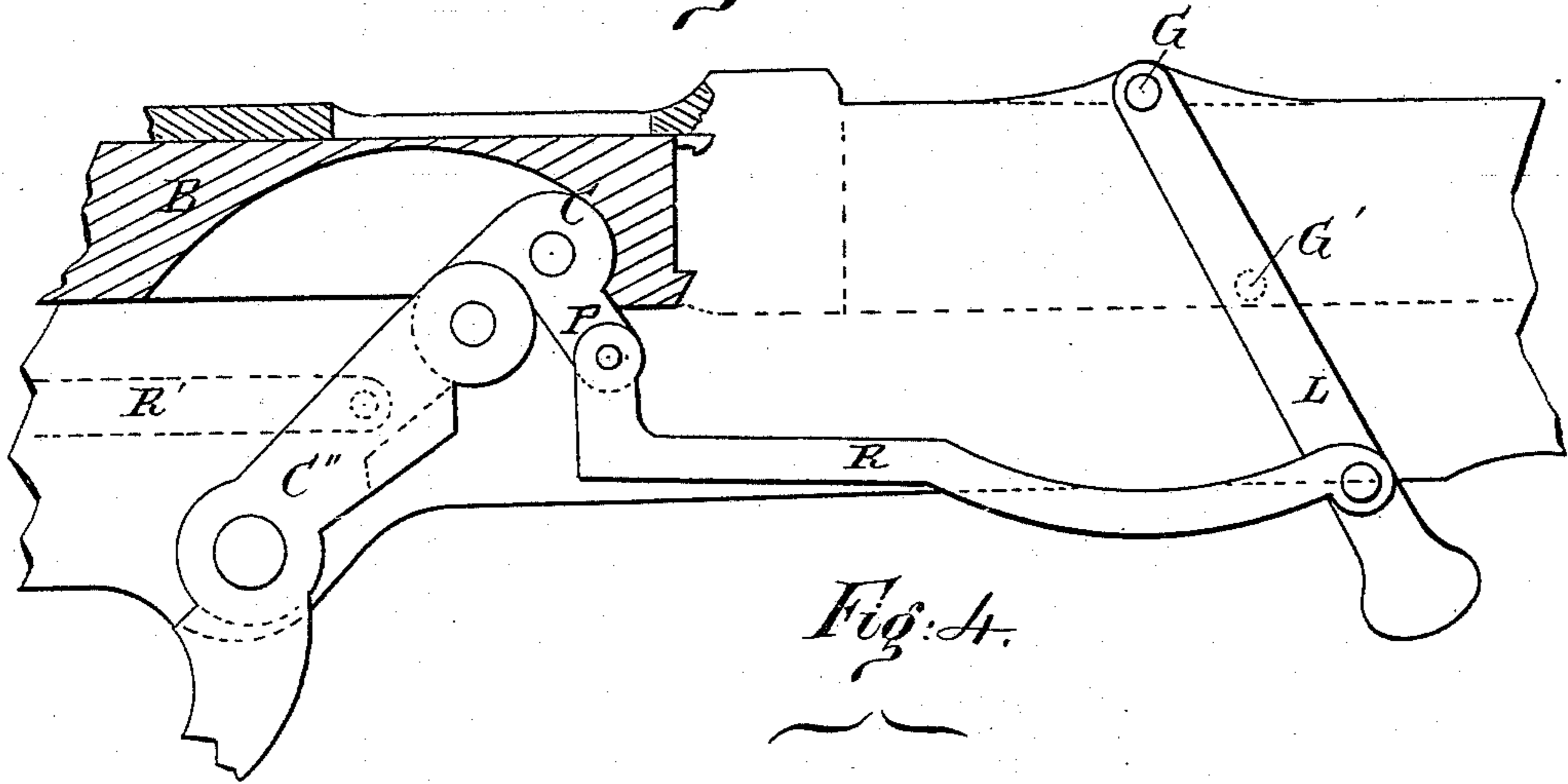
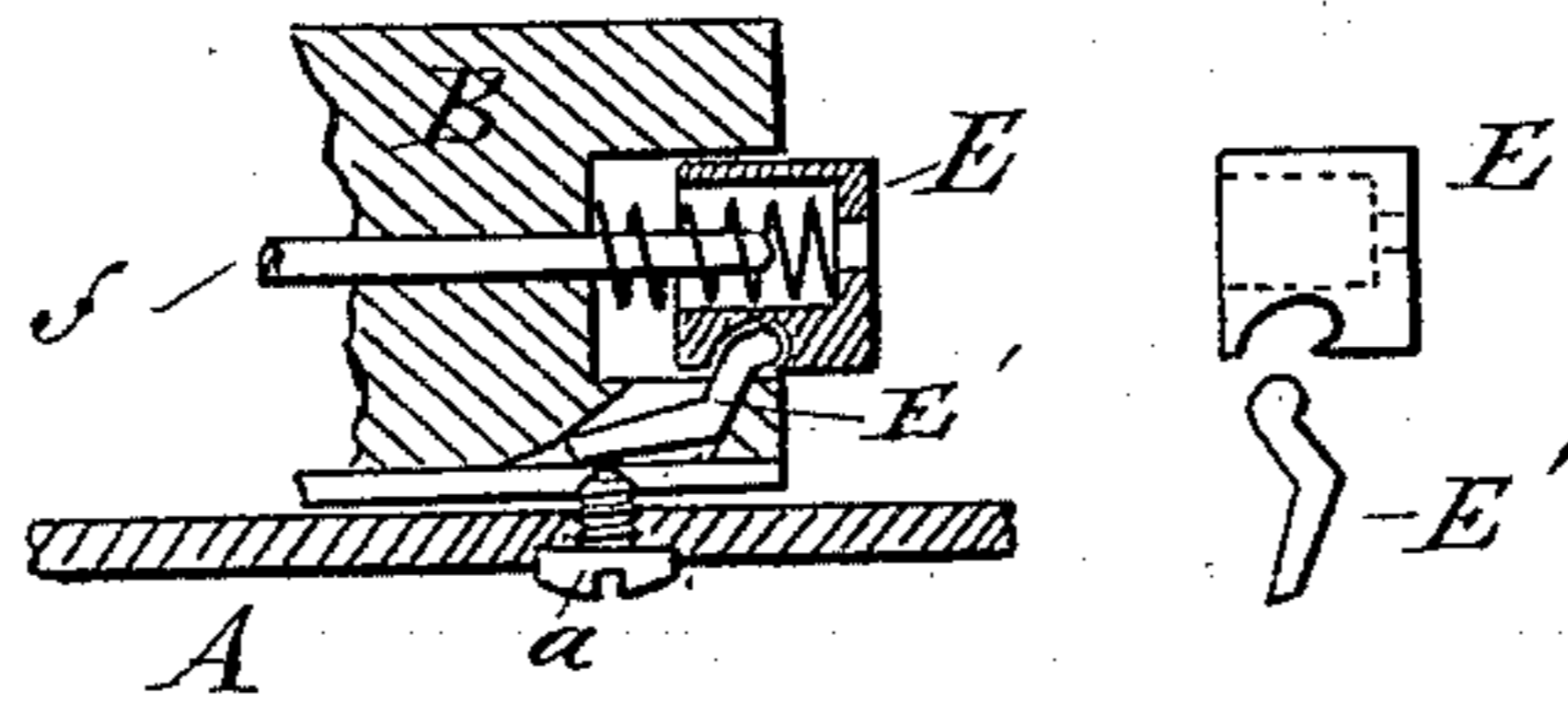


Fig: 4.



WITNESSES:

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INVENTOR

Andrew Burgess

UNITED STATES PATENT OFFICE.

ANDREW BURGESS, OF OWEGO, NEW YORK.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 290,394, dated December 18, 1883.

Application filed September 18, 1883. (No model.)

To all whom it may concern:

Be it known that I, ANDREW BURGESS, of Owego, county of Tioga, and State of New York, have invented a new and useful Improvement in Magazine Fire-Arms, of which the following, in connection with the accompanying drawings, is a specification.

My invention relates to magazine fire-arms; and it consists of peculiar arrangements of the locking mechanism and mode of operating the breech, with other combinations of parts, hereinafter more fully described.

The object of my invention is to produce a gun which can be fired repeatedly, without removal from the shoulder of the operator, by easy manipulation, and at the same time to produce a gun of easy and simple construction and strength of parts.

Similar letters of reference indicate corresponding parts.

Figure 1 is a side view, partly in section, showing this arm as provided with two links, by which the bolt is locked and operated through the rod R and lever L, the rod R being guided by the groove S inside the frame, and the force being applied to the operating-lever L, pivoted to the bottom of the arm, forward of the frame A, so that the forward movement of its handle L' opens the breech. Fig. 2 is a cross-section of Fig. 1 on the line *x x*, showing a mode of attaching the lever L to the arm by the band D. Fig. 3 shows a similar lever applied to my "single-link" system, the link being provided with a projection, P, to which the rod R is attached. A rod, R', is also shown in position to operate any ordinary lever-bolt system when extending to a lever at rear of frame, or a sliding guard, as in my application of July 27, 1883. Fig. 4 is a sectional plan view of front end of the bolt, showing the ejector and mode of operating it by combined spring and positive force.

In accompanying drawings the carrier is not shown, as it does not form a part of this invention.

A is the frame; B, the bolt; *m*, the magazine; C and C' the links; R, the reciprocating rod that connects the lever to the operating mechanism of the bolt. L is the lever; L', its removable extension; D, the band or fixture to which the lever is pivoted, and E is the eject-

or. The frame of first figure is provided with the reciprocating bolt B, which is locked by links C C'. The rear link, C, has a slot or groove, *c*, into which the pin *c'* of the rod R projects. The rod R extends forward of the frame, and is there attached to the lever L, which is pivoted to the gun, and has a part projecting below its pivot and the gun, which forms a handle to be grasped by the hand of the operator. In Figs. 1 and 2 this lever is pivoted to the band or projecting fixture D and its upper end extended to engage the rod R, so that a forward movement of the handle L', or that part of the lever below the frame, forces the rod R rearward, and its pin *c'*, engaging in the slot *c* of the rear link, and also in the guiding slot or groove S in the frame, turns the said link downward to unlock the breech, and then moves the bolt rearward to the position shown in dotted lines, and its reverse movement closes and locks the breech in a similar manner.

I prefer to make the groove S partly in an arc of a circle of which the pivot of the link is the center; but the forward part of said groove I straighten downward, so that the bearing of pin *c'* on its upper wall presses diagonally downward to wedge the link down by the slot *c* until the breech is unlocked, and can therefore be moved backward. The lever L is pivoted to the gun forward of the frame, and in Fig. 2 I show a wide band arranged to form a firm support and cover the upper arm or arms of the lever.

When it is preferred to operate the gun by reverse motion to the above, so that the rearward movement of lever opens the breech, I pivot the lever L to the barrel, or at the top of the gun, as shown in Fig. 3 at G or G', and the rod R is extended backward from the lower part of said lever to engage the locking mechanism of the bolt. I here show it pivoted to an extension, P, of the link C, so that its backward pressure turns the link C back and upward to unlock the bolt; but it may engage the brace or lever C'' through a mortise to operate in a similar manner; or, as I show in dotted lines in same figure, the operating-rod (as R') may extend rearward, and there be engaged by a lever or slide, as shown in my before-mentioned application of July 27, 1883.

The ejector, Figs. 1 and 4, consists of a spring-pin, E, with addition of dog E', which engages said pin and passes diagonally through the bolt to engage stop *a* in the frame. By this means, if the ejector-spring fails to operate with sufficient force, the pin or dog E', arranged in the bolt, as shown in my Patent No. 235,204, stops the ejector by positive force of the stop-pin *a* until said dog extends so far forward down the incline in the bolt that the dog may pass under the stop, as shown in Fig. 4.

I make an elongated under-cut or dovetail opening in the side of the ejector-pin, so that the dog may be turned or hooked into or out of said cut when the ejector is pressed back into the bolt, and the front side of said dog will engage the wall at front limit of the cut-out in the bolt to prevent the ejector from springing too far forward.

I show a removable handle or extension, L', to the lever in Fig. 1, which may be affixed in any known manner.

In lieu of the pin *c'* of the rod R, Fig. 1, a link or other connection may be used without materially altering the operation of the parts.

It will be also obvious that the spring-ejector E may be formed with an arm and pivoted to the bolt.

I do not claim any special means of attaching rod R to lever L, as such may be the ordinary connection of a slot and pin.

The special construction of diagonal links and projection P of Fig. 3 is not claimed herein, the same being claimed in my application filed November 10, 1883, No. 111,421.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a magazine-gun, a reciprocating breech-bolt, links, arranged substantially as described, to lock said bolt, the forward link being pivoted to the bolt and the rear link to an abutment in the frame, and a connecting-rod leading from said links to an operating device forward of the frame, all arranged and combined substantially as set forth.

2. In a magazine-gun, the reciprocating bolt

and the locking-links, arranged as described, the rear link having a slot, (as *c'*,) in combination with the reciprocating connecting-rod, the pin carried by said rod and entering said slot, and the guiding-groove in the frame, into which said pin also enters.

3. The frame of a gun having guiding groove S cut in form of an arc, and having the downward bend forward, as described, in combination with the pin *c'*, which enters said groove, and the reciprocating rod which carries said pin and operates the bolt and locking mechanism, all combined substantially as set forth.

4. In the frame of a gun, a reciprocating breech provided with locking mechanism, substantially as described, and an operating-rod connected to said locking mechanism, in combination with a lever located forward of the frame, and fulcrumed beneath the barrel and connected to the operating-rod, substantially as shown and specified.

5. A lever provided with a handle projecting beneath the barrel, and a band, D, which clasps the fore-stock and serves as a fixed fulcrum for said lever, in combination with a connecting-rod to operate the breech of a gun, substantially as described.

6. A reciprocating bolt provided with a spring-ejector, in combination with a pin or dog in the bolt, to engage said ejector diagonally through the bolt, and a stop in the frame in the line of movement of the dog E, substantially as and for the purpose set forth.

7. The combination, with the breech mechanism of a breech-loading fire-arm, of an operating-lever pivoted forward of the frame, and breech-closing mechanism, and a connecting-rod connected with said lever at one end and with the operative mechanism of the breech at the other, whereby the breech may be opened and closed by the movement of said lever and connecting-rod, substantially as set forth.

ANDREW BURGESS.

In presence of—

J. J. VAN KLEECK,
A. F. TIFFANY.