

(No Model.)

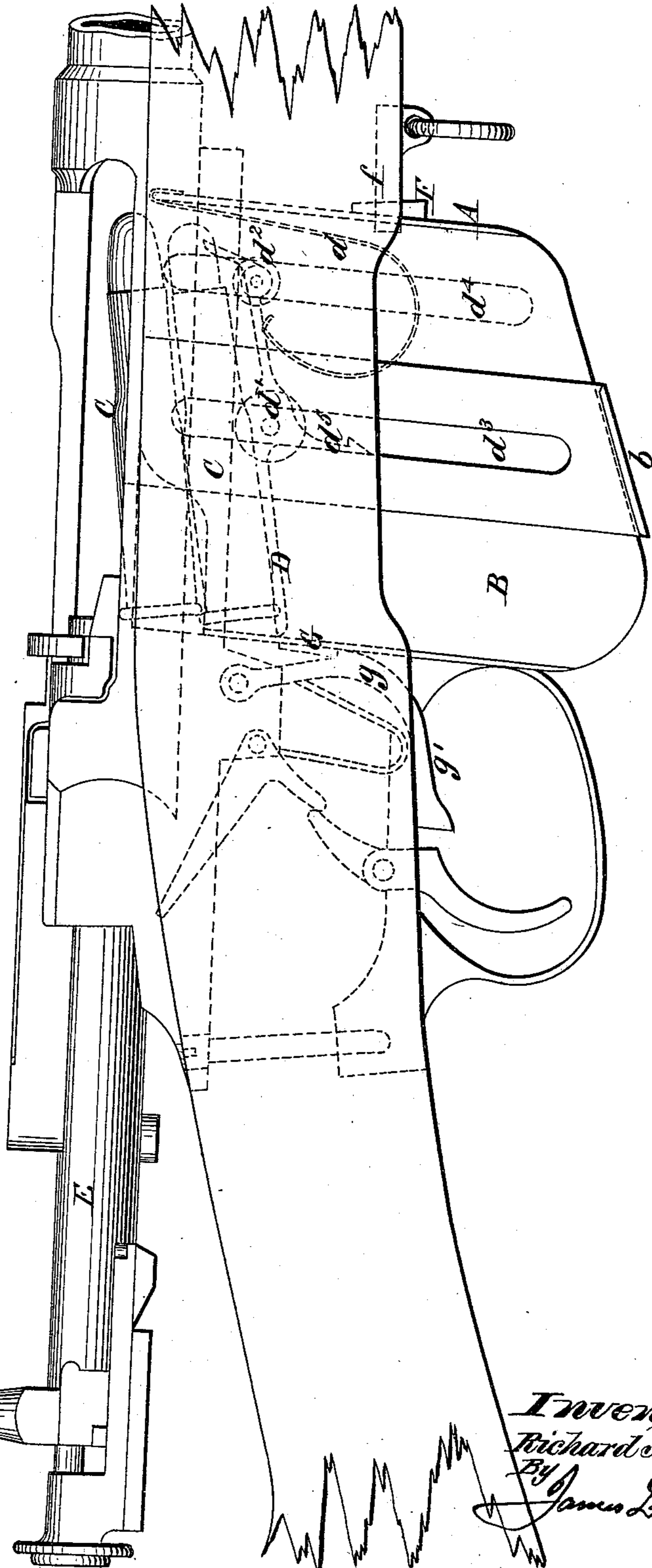
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R. MORRIS.
MAGAZINE FIRE ARM.

No. 376,901.

Patented Jan. 24, 1888.

FIG. 1.



Witnesses.
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(No Model.)

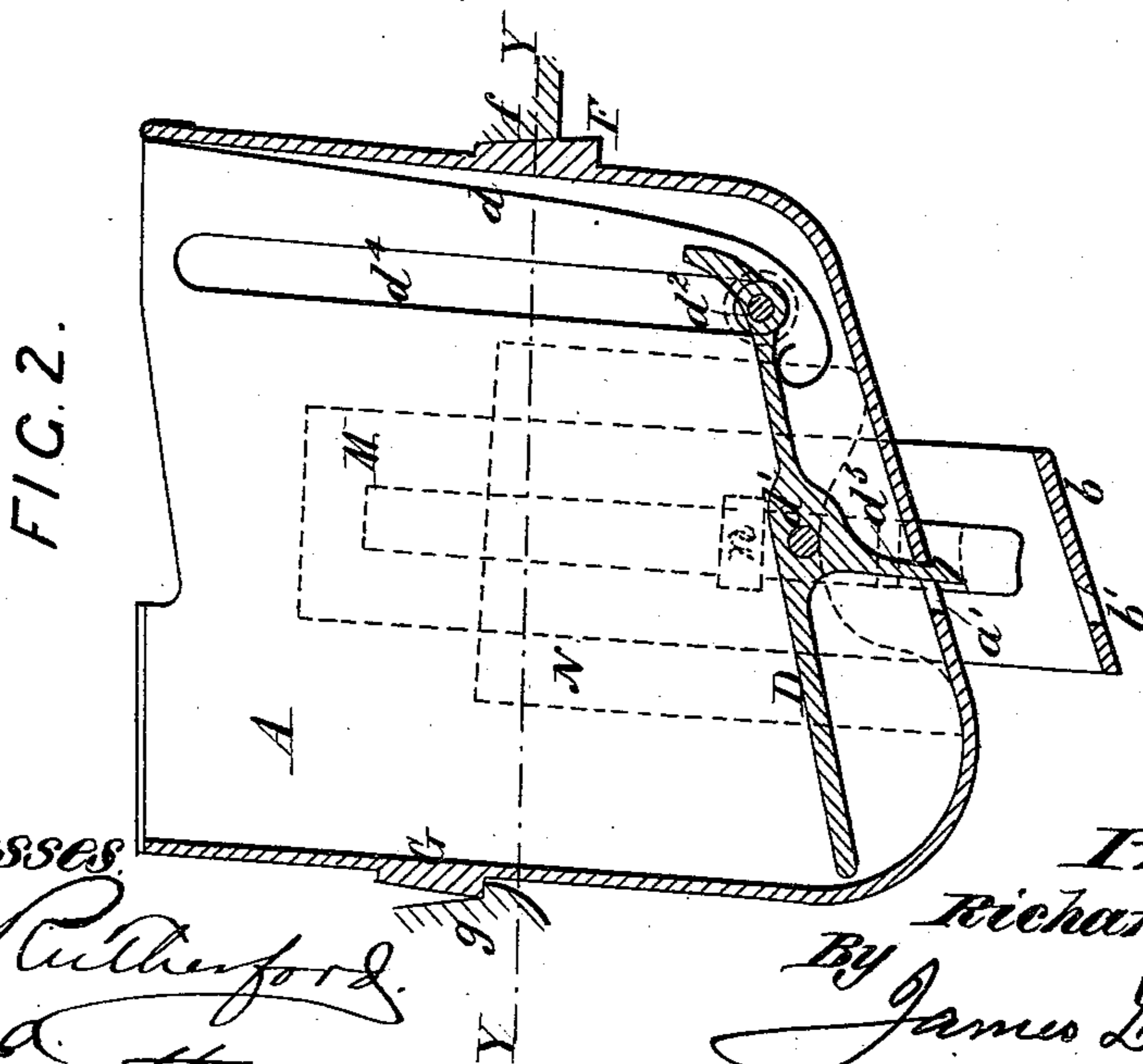
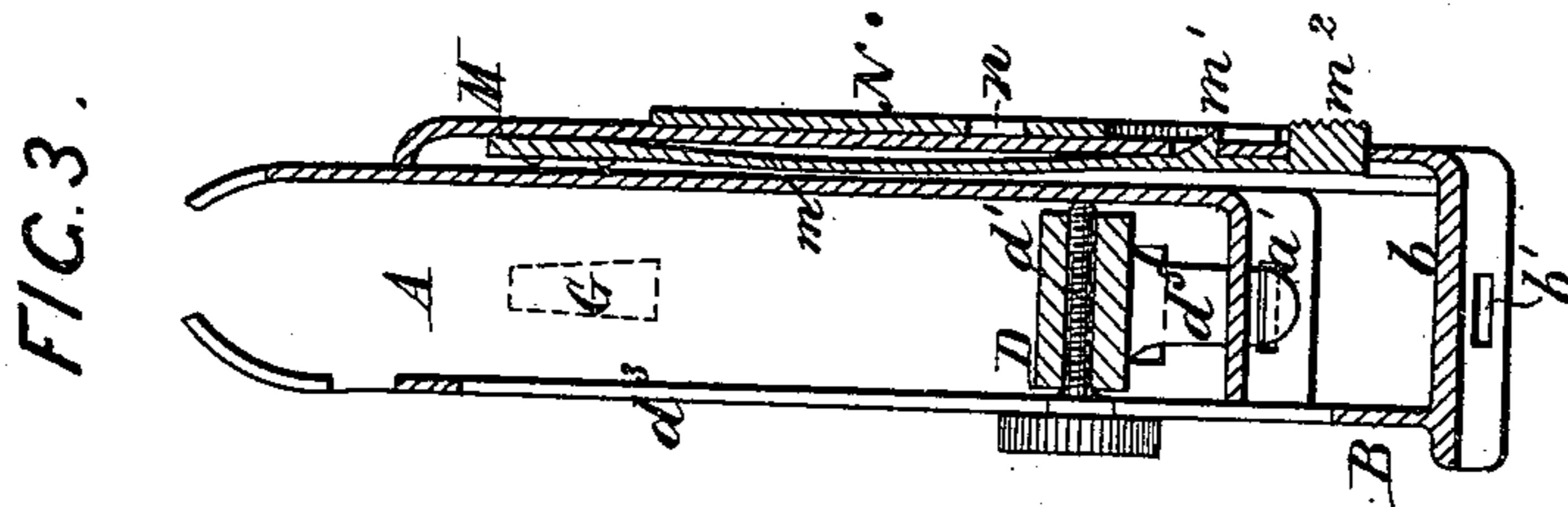
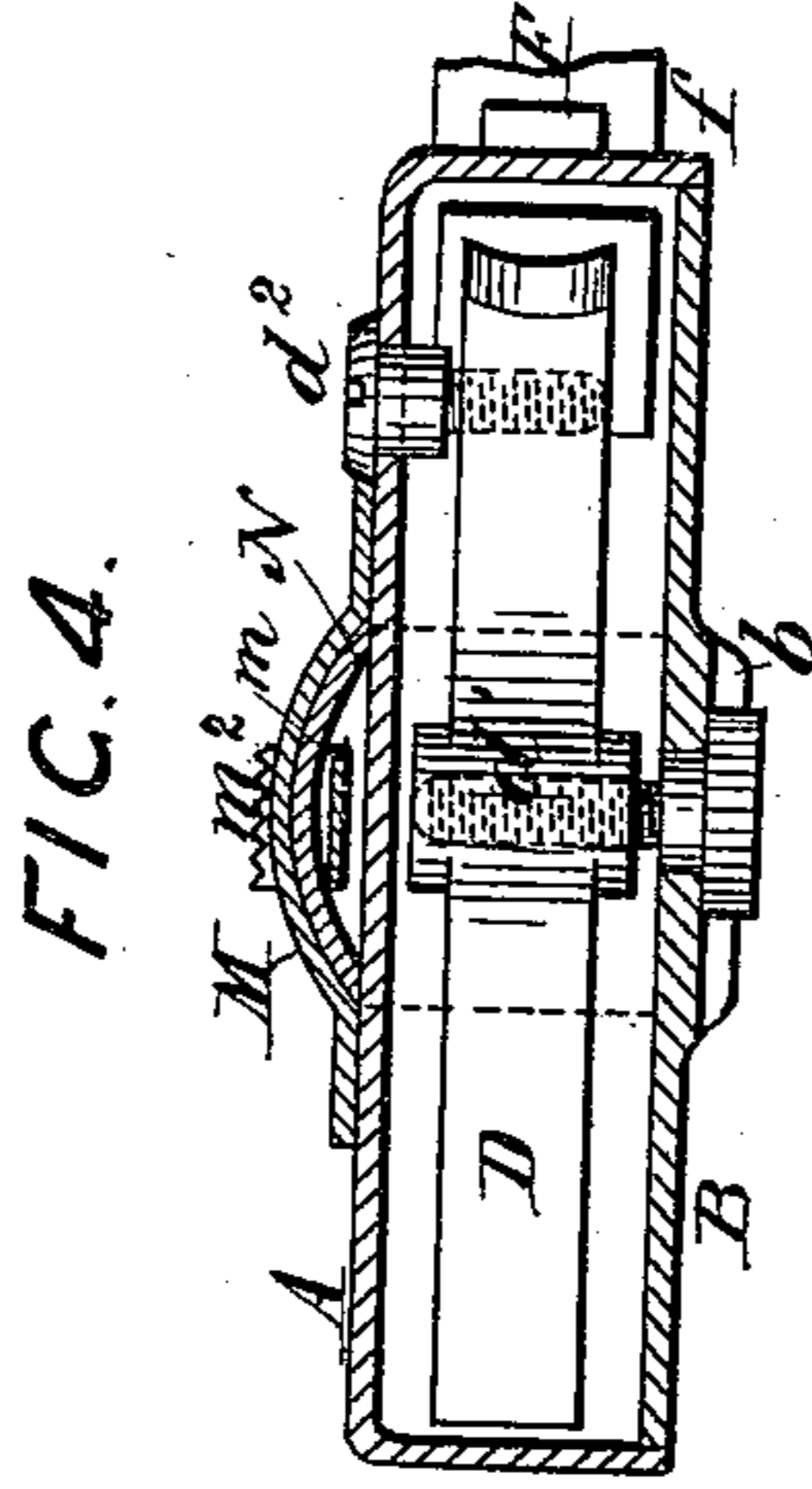
2 Sheets—Sheet 2.

R. MORRIS.

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Witnesses

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Inventor:
Richard Morris.
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UNITED STATES PATENT OFFICE.

RICHARD MORRIS, OF BLACKHEATH, COUNTY OF KENT, ENGLAND.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 376,901, dated January 24, 1888.

Application filed September 6, 1887. Serial No. 248,950. (No model.) Patented in England April 20, 1887, No. 5,786; in Belgium August 29, 1887, No. 78,693, and in Italy November 29, 1887, XLIV, 253.

To all whom it may concern:

Be it known that I, RICHARD MORRIS, a citizen of England, residing at Bennett Park, Blackheath, in the county of Kent, England, have invented a new and useful Improvement in Magazines for Fire-Arms, (for which I have obtained patents in Belgium, dated August 29, 1887, No. 78,693; in Italy, dated November 29, 1887, Vol. XLIV, No. 253, and by an application for patent in Great Britain, dated April 20, 1887, No. 5,786,) of which the following is a specification.

My invention relates to the construction of the magazine used in connection with a rifle or other fire-arm for holding a number of cartridges ready to be successively brought into line with the barrel and discharged. When such a magazine is fixed to the arm with its mouth opening upward, a spring is used to press up the cartridges, and it is a somewhat difficult and tedious operation to refill the magazine with cartridges by introducing them successively at the upper mouth and pressing them down in opposition to the spring. According to my invention I facilitate this operation in the following manner: I make one side of the magazine as a sliding door, which can be slid downward, leaving the magazine open on one side for admission of the fresh cartridges. The door acts on a stud, which, when it is pulled down, pulls down with it the movable bottom or platform that is pressed upward by the spring, and this platform, when it is so pulled down, is held down by a latch engaging at the bottom of the magazine. When the magazine is refilled with cartridges, the sliding door is pushed up again, closing them in, and at the last part of its upward movement it releases the latch which held down the platform, leaving it free to be pressed upward by the spring and to deliver cartridge after cartridge at the upper mouth of the magazine.

I will describe my invention applied to a rifle having a sliding bolt which is advanced to push the cartridge into the barrel, and which is drawn back to extract and eject the case of the spent cartridge and allow a fresh cartridge to be pushed up in front of it.

Figure 1 is a side view of part of the rifle

with the magazine attached to it. Fig. 2 is a vertical longitudinal section of the magazine. Fig. 3 is a vertical transverse section, and Fig. 4 is a sectional plan on line Y Y of Fig. 2.

The magazine A is a casing made of sheet metal of rectangular form in plan, closed at the two ends and at the back, but open on the front side, which is fitted with a door, B, that can be pulled down, exposing the interior of the magazine, into which fresh cartridges can be introduced at the side thus opened.

In order to guide the door in its sliding movement, an arm, *b*, attached to the door, passes under the bottom of the magazine and bends upward, so as to form a vertical guide-bar, M, that slides within a guide, N, fixed on the back of the magazine.

In order to obtain rigidity consistently with lightness, I prefer to make the guide M of a piece of metal plate transversely curved or corrugated, as shown in Fig. 4. Within the hollow of M is fixed a spring, *m*, which at *m'*, near its lower end, has a latch projection, and at *m''*, below that, a projection to receive the pressure of the finger. The latch *m'*, entering a slot, *n*, of the guide N, holds the door B when it is pushed up, closing the side of the magazine.

When it is desired to open the side in order to introduce fresh cartridges, the operator takes hold of the front rim of *b* and presses on *m''*, so as to disengage the latch *m'*, and he can then pull the door B down until it is stopped, as I will now describe.

Within the magazine the platform or movable bottom D is free to move up or down. It is pressed upward by a spring, *d*, and pushes the cartridge C up through a slot to the hollow behind the breech and in front of the bolt E. The slot through which the cartridge is pushed up is of such form that the front end of the cartridge can rise through it, as indicated in Fig. 1, ready to enter the breech of the rifle; but the rear end or flange of the cartridge cannot pass through the hinder part of the slot. When the bolt E is advanced, it pushes the cartridge forward to a wider part of the slot, through which the flange of the cartridge is free to rise while the cartridge is being pushed into the bore. The platform D has in its middle a guide-pin, *d'*, which pro-

jects through a long vertical slot, d^3 , in the door B, and near the front end of the platform D it has another guide-pin, d^2 , which projects through a long vertical slot, d^4 , in the back of the magazine. Both the pins d' and d^2 have external heads, the head of d' overlapping the door-slot d^3 and the head of d^2 overlapping the back slot, d^4 . From the middle of the platform D an arm, d^5 , projects downward and terminates in a latch-hook which can enter a slot, a' , in the bottom of the magazine. When the door B is pulled down, as already described, it moves a certain distance down without moving the platform D; but when the end of the door-slot d^3 comes against the pin d' the farther descent of the door B brings down the platform D with it until the latch of its arm d^5 enters the slot a' and is caused by the spring d to catch under the edge of the slot. On now pushing up the door B, the pin d' being free in the door-slot d^3 , the platform D remains down until a slot, b' , which is made with a sloping edge in the lower limb, b , of the door, acts on the latch of d^5 , disengaging it from the edge of the slot a' , and thereupon the platform D is free to be pressed up by the spring d , delivering cartridge after cartridge to the hollow in front of the bolt E.

The magazine may be permanently fixed to the rifle. I prefer, however, to make it removable, so that the rifleman having several charged magazines in his pouch can readily remove an empty magazine and put a charged one in its place. For this purpose I fix on the front end of the magazine a wedge-piece, F,

which can enter and become tightened in the metal piece f , that holds the strap-ring, and on the rear end of the magazine I make a latch projection, G, which engages with a spring-trigger, g , the tail g' of which projects from the stock in front of the firing-trigger. On pressing up the tail g' the catch G is released and the magazine can be pulled out of its seating in the stock.

Having thus described the nature of my invention and the best means I know for carrying the same out in practice, I claim—

For a breech-loading fire-arm, a detachable magazine, A, having at its front a vertically-sliding door, B, with a back guide, M, held up by a spring-catch, m m' m^2 , and having within it a sliding platform, D, urged upward by a spring, d , the said platform having a latch-arm, d^5 , and pins d' d^2 , guided, respectively, in slots d^3 d^4 of the sliding door and magazine-back, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 22d day of August, A. D. 1887.

RICHARD MORRIS.

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