(No Model.) 4 Sheets—Sheet 1.

J. M. & M. S. BROWNING.

MAGAZINE FIRE ARM.

No. 356,271. Patented Jan. 18, 1887.

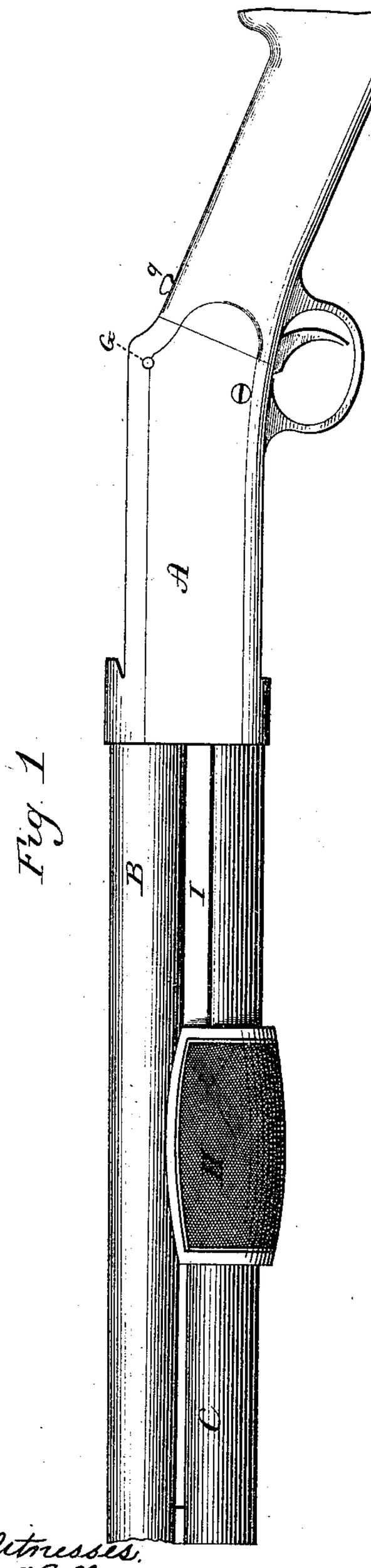

Fig. 1

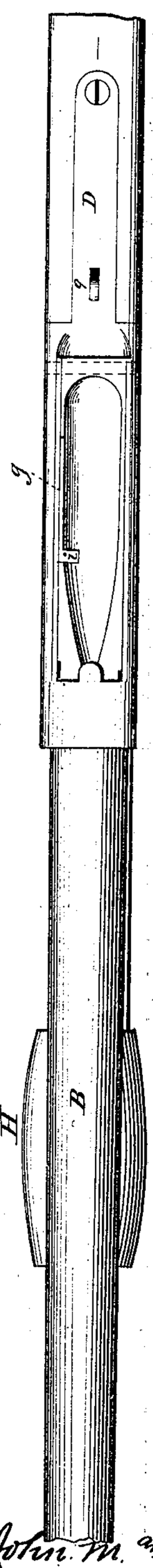

Fig. 2

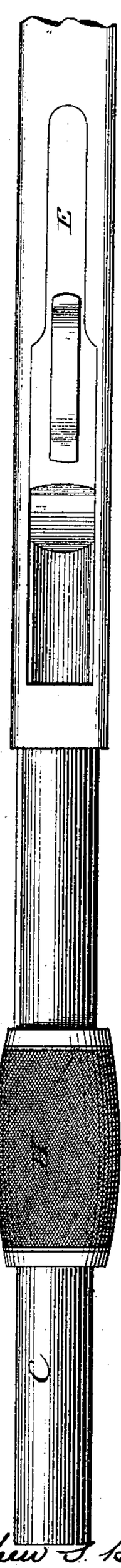

Fig. 3

Witnesses.
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J. M. & M. S. BROWNING.

MAGAZINE FIRE ARM.

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Fig. 4

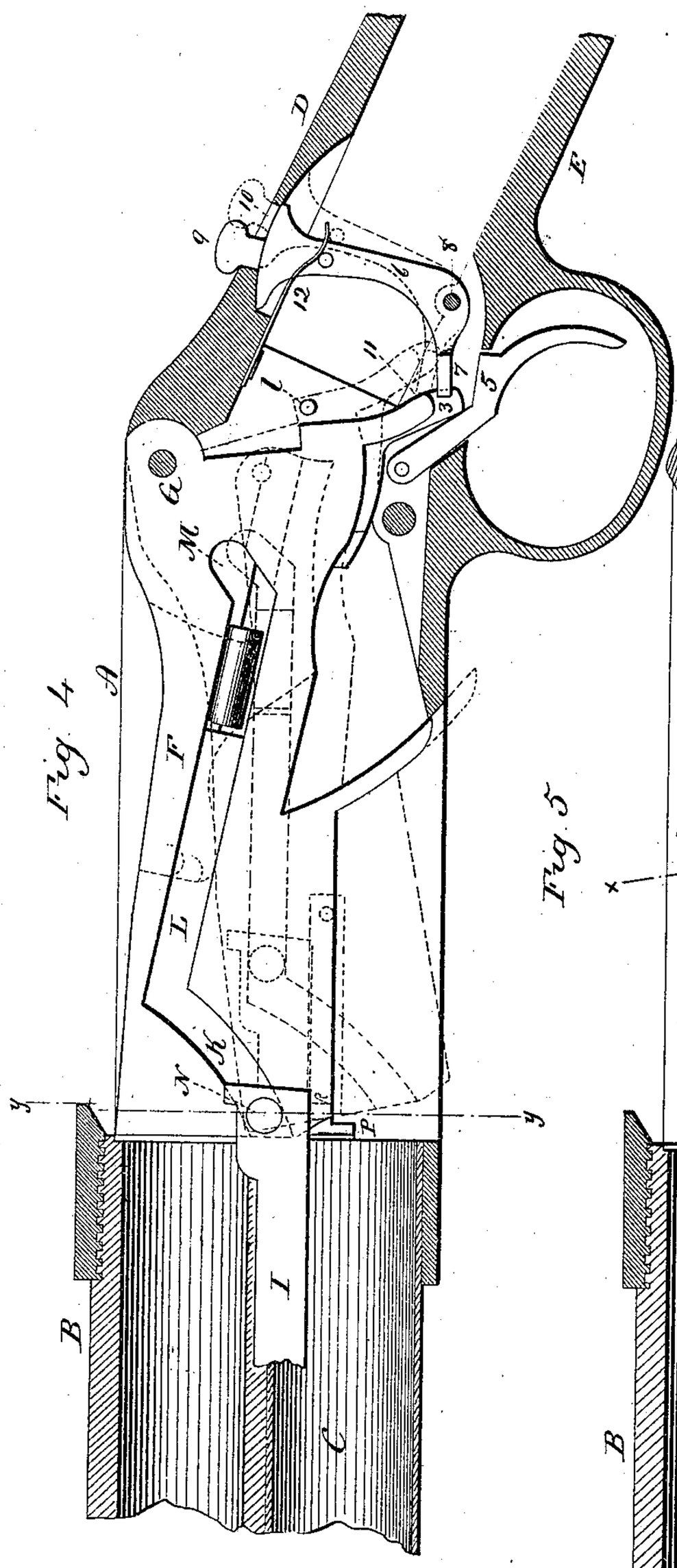
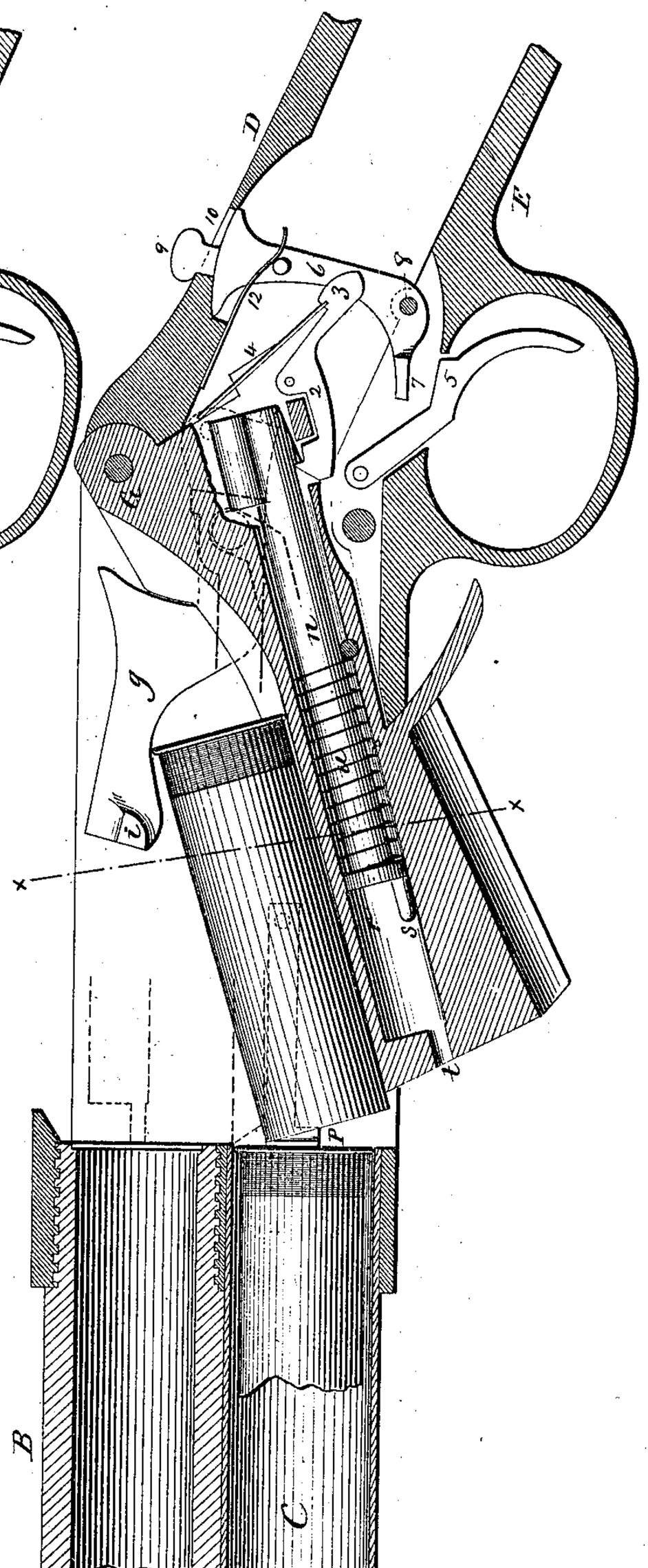


Fig. 5



Witnesses.
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(No Model.) 4 Sheets—Sheet 3.

J. M. & M. S. BROWNING.

MAGAZINE FIRE ARM.

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Fig. 6.

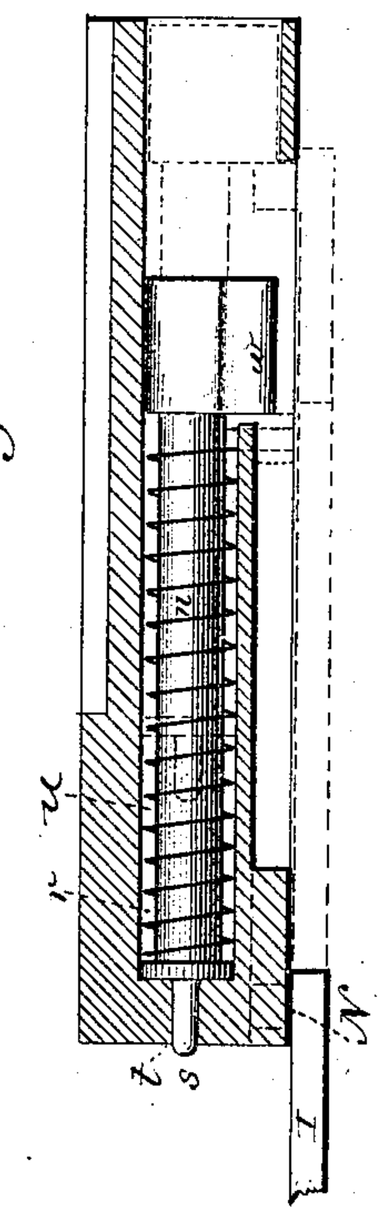


Fig. 8

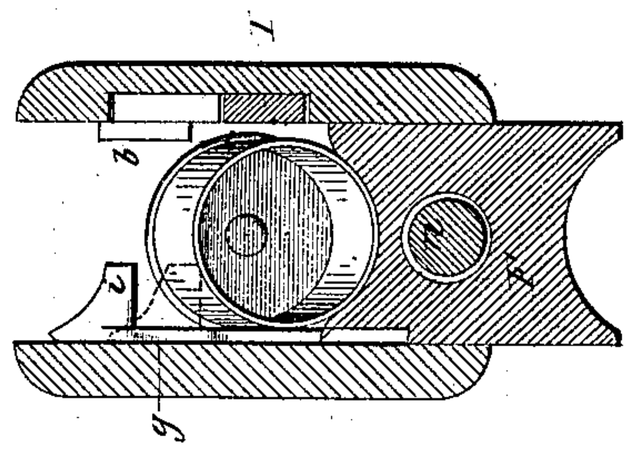


Fig. 9

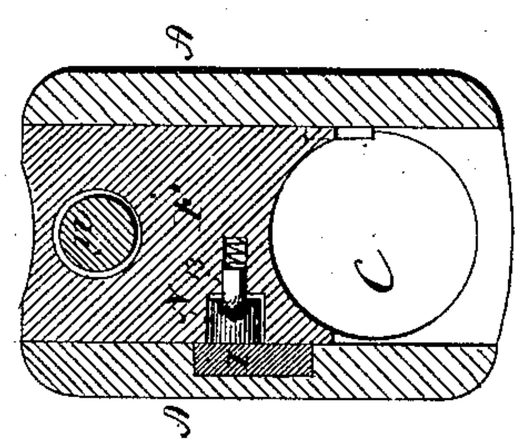


Fig. 10

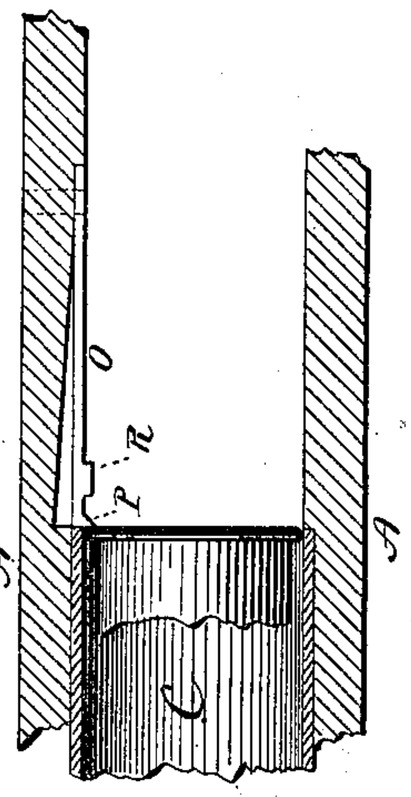
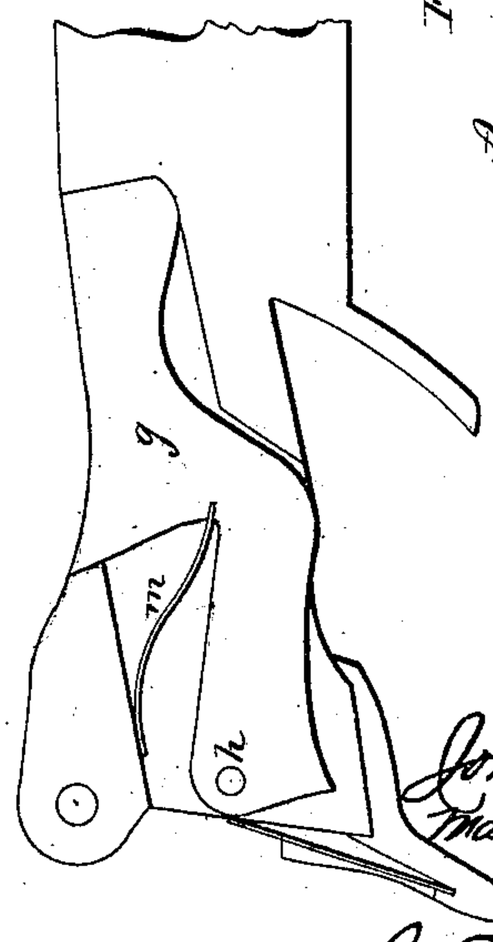


Fig. 7.



Witnesses.
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(No Model.)

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J. M. & M. S. BROWNING.

MAGAZINE FIRE ARM.

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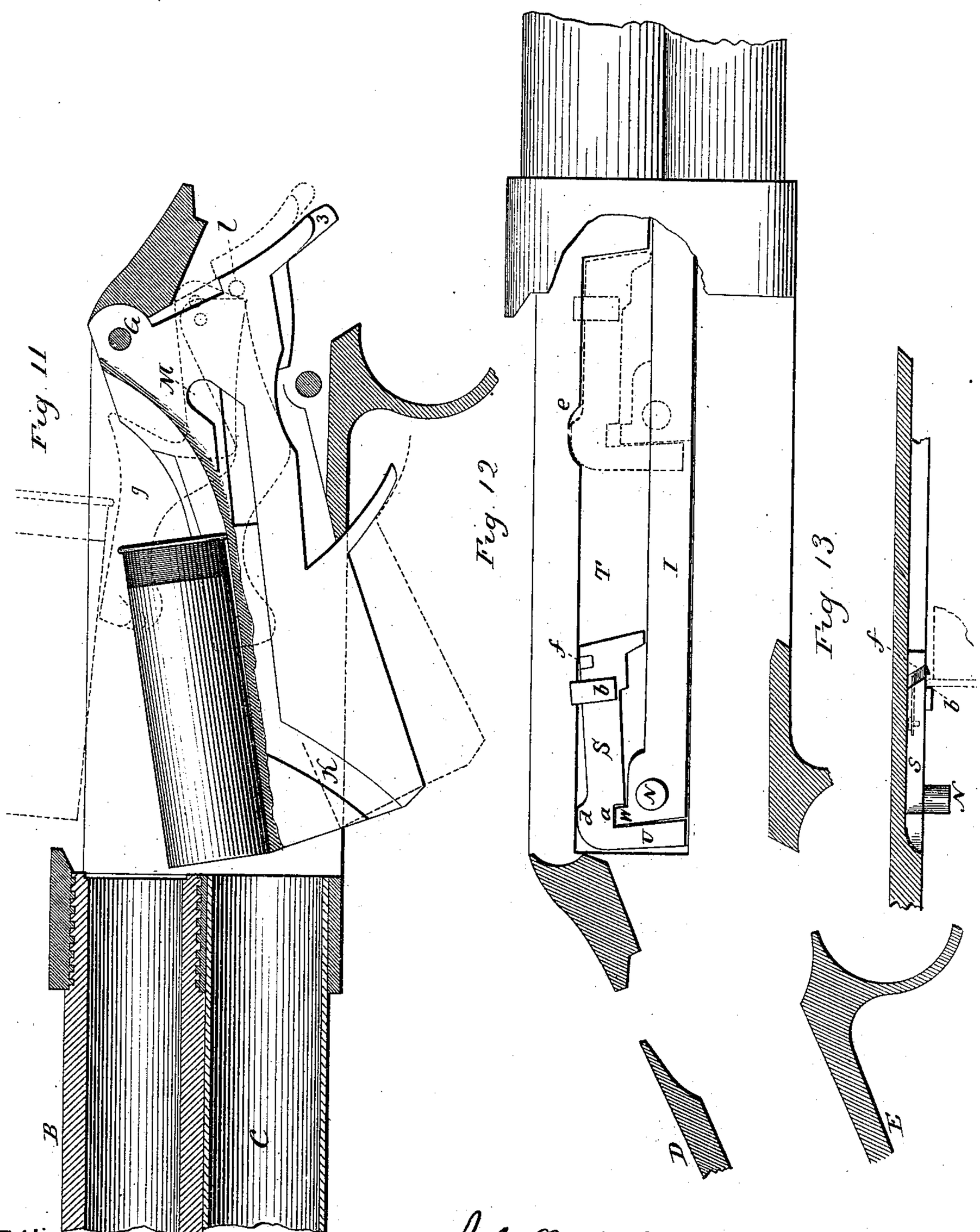

Witnesses.
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Inventors.
By Atty.
Thos. E. Earle.

UNITED STATES PATENT OFFICE.

JOHN M. BROWNING AND MATTHEW S. BROWNING, OF OGDEN CITY, UTAH TERRITORY, ASSIGNORS TO THE WINCHESTER REPEATING ARMS COMPANY, OF NEW HAVEN, CONNECTICUT.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 356,271, dated January 18, 1887.

Application filed September 6, 1886. Serial No. 212,822. (No model.)

To all whom it may concern:

Be it known that we, JOHN M. BROWNING and MATTHEW S. BROWNING, of Ogden City, in the county of Weber and Territory of Utah, have invented a new Magazine Fire-Arm; and we do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view, Fig. 2 a top view, and Fig. 3 an under side view on a reduced scale; Fig. 4, a sectional side view showing the breech-piece in the up or closed position; Fig. 5, a vertical central section through the breech-piece in its down or open position; Fig. 6, a horizontal section through the breech-piece illustrating the action of the bar in cocking the hammer; Fig. 7, a side view of the breech-piece detached, and reversed from that seen in Fig. 4; Fig. 8, a vertical section on line *x x* of Fig. 5, looking rearward; Fig. 9, a vertical section on line *y y* of Fig. 4, looking forward; Fig. 10, a longitudinal section through the magazine, showing the latch; Fig. 11, a longitudinal sectional view illustrating the movement of the breech-piece and the lever G, as in holding the cartridge on the breech-piece and ejecting the shell; Fig. 12, an inside view of the receiver, showing the bar and the slide for forcing the cartridge to the barrel and withdrawing the shell; Fig. 13, a horizontal section through the one side of the receiver, showing a top view of the said slide.

This invention relates to an improvement in that class of magazine fire-arms in which the barrel is open into the receiver at its rear end, and the magazine arranged beneath the barrel, also open into the receiver, and in which the breech-piece is hung in the receiver at the rear, and so as to swing upon its pivot up and down to open and close the barrel, the breech-piece also serving as the carrier to receive the cartridge from the magazine and transfer it to a position in line with the barrel, from which it is forced into the barrel prior to the final closing or rise of the breech-piece, the object being a simple construction, and in which the mechanism of the arm—that is to say, the lock, carrier, and the breech-piece—are all combined in a single structure.

A represents the receiver, to the forward end of which the barrel B is attached, and beneath the barrel is the magazine C, both opening into the receiver at the rear. the receiver also constructed with a tang, D, at the rear upon the upper side, and provided with a tang, E, below, by which the receiver is secured to the stock in the usual manner.

F, the breech-piece, is arranged in a vertical opening through the receiver and hung at the rear upon a pivot, G, near the top of the receiver, and upon which the breech-piece may turn, as from the position seen in Fig. 4 to that seen in Fig. 5, and return.

The up-and-down movement is imparted to the breech-piece by means of a handle, H, surrounding the magazine forward of the receiver and movable in suitable guides toward and from the receiver. From this handle a rod or bar, I, extends through the forward end of the receiver and so as to work in a longitudinal groove, J, in the side of the receiver, (see Figs. 7 and 8,) the inner side of the bar preferably being flush with the side of the receiver in which it works. A groove, K L M, is formed in the side of the breech-piece upon which the bar I is arranged, and at the rear end of the bar I is a stud, N, projecting inward and so as to work in the said groove in the side of the breech-piece. As the breech-piece is to act as the carrier, it is necessary that in its opening movement it shall drop to a position so low as to permit the cartridge to pass from the magazine onto its upper surface, as seen in Fig. 5; and because the breech-piece is to act as a carrier it follows that in its ascent it must rest when it has been raised so far as to bring the cartridge which it has received from the magazine into line with the barrel, and then, after the cartridge has been moved forward into the barrel, the breech-piece must rise to its up position in rear of the head of the cartridge, and so as to resist

recoil in firing. To this end the forward portion, K, of the groove in the side of the breech-piece inclines upward from its forward end, and so that the stud N, under the movement of the bar I, will act as a cam therein, and during the first part of the rear movement of the bar I it will work through the groove K and force the breech-piece downward, as seen in broken lines, Fig. 4, to a position so far below the barrel as to leave its rear end exposed, either for the insertion of a cartridge or the extraction of an exploded shell. From the upper end of the portion K of the groove the portion L is inclined downward when the breech-piece is in its up position, as seen in Fig. 4, and this inclination of the part L is such that when the breech-piece is dropped to the position below the barrel just described, and as seen in Fig. 4, the groove in that position is in line with the path of the bar I, and so that, the bar continuing its rear movement, the stud will work through this straight part L of the groove without effect upon the breech-piece. At the rear end of the groove the portion M is inclined upward and backward, so that as the stud N arrives at the rear end of the straight portion L of the groove it will enter the inclined part M and act thereon as a cam, in like manner as it did in the first part, L, and so that in completing the rear movement of the bar I the breech-piece will be forced to its extreme down position, as seen in Fig. 5, and in that extreme down position the magazine is opened at the rear, so as to permit the movement of the column of cartridges therein, and so that the rear cartridge in the magazine will be forced onto the top of the breech-piece, as seen in Fig. 5, and in a position to be transferred into line with the barrel. With the cartridge so standing on the breech-piece, the handle is now moved forward, drawing the bar I with it, and during the first part of the movement the stud N works forward through the groove M, and, acting therein as a cam, raises the breech-piece to the position indicated in broken lines, Fig. 4, and so that the cartridge thereon will stand in line with the barrel, and standing in that position the breech-piece rests, while the handle and bar continues its forward movement, the stud N passing through the straight portion L of the groove in the breech-piece without effect thereon; and during this movement of the stud through the longitudinal or straight part L of the groove the cartridge is transferred to the barrel, as hereinafter described, and then the stud, arriving at the forward end of the part L of the groove, enters the forward inclined part K, and, continuing its movement, raises the breech-piece into its up or closed position, as seen in Fig. 4. Thus in the backward or opening movement of the handle and bar I the breech-piece is first dropped to a position slightly below the barrel, and there rests, while the shell in the barrel may be drawn from the barrel onto the breech-piece and removed. Then during the last part of the opening movement of the handle the breech-piece is further dropped to a position below the magazine, and so as to receive the cartridge. Then on the return of the handle and its bar I the first part of the movement raises the breech-piece to bring the cartridge thereon into line with the barrel, and there rests, while the movement of the handle continues, and the cartridge is carried from the top of the breech-piece into the barrel, and then in the last part of the forward movement of the handle the breech-piece is raised to its fully-closed position. Thus the breech-piece serves both as a breech-piece and a carrier. When the breech-piece is in its fully-closed position, its under side stands above the open rear end of the magazine, as seen in Fig. 9, and also seen in broken lines, Fig. 5, and so that that end of the magazine is exposed at the rear when the breech-piece is closed; and in this condition the magazine is charged, the cartridges being successively introduced to the magazine beneath the breech-piece.

To hold the column of cartridges in the magazine, a spring-latch, O, is arranged at the mouth of the magazine, over the nose P of which the heads of the cartridges will pass as they are successively forced into the magazine, and the latch spring over the head of the last cartridge inserted, as seen in Fig. 10, so as to support the column against the action of the spring; but to release the column, so that the rear cartridge may pass onto the breech-piece when in the position to receive it, the latch is constructed with an inward projection, R, in the path of the breech-piece in its descent. The breech-piece striking the projection R forces the nose P away from the head of the cartridge, leaving the cartridge free to move rearward under the action of the magazine-spring against the end of the descending breech-piece, and then as the breech-piece arrives at its down position the rear cartridge is free from the action of the latch, and so that, the column moving rearward, the rear cartridge is forced onto the top of the breech-piece, as seen in Fig. 5, the next cartridge in the column being stopped by the nose P of the latch, as seen in Fig. 5. Then as the breech-piece rises its action upon the latch will be the same as in the descent, but the breech-piece passes above the latch, so as to leave it free before the breech-piece is finally closed, and as the breech-piece so passes the latch its forward end bears against the head of the rear cartridge, so as to force it into the magazine forward of the latch, that the latch may engage the rear cartridge before the breech-piece reaches its extreme up position.

To remove the cartridge from the breech-piece into the barrel, a slide, S, is arranged in a longitudinal groove, T, in the side of the receiver above the bar I. (See Figs. 8 and 12.) The slide is constructed with a finger, U, extending downward from the rear end, in rear of the rear end of the bar I, and so that the bar I in its rear movement will force the slide

S from the position seen in broken lines, Fig. 12, to the rear position, also seen in that figure. The bar I is constructed with an upward projection, W, and the slide S with a corresponding notch, *a*, with which the projection W may engage, as seen in Fig. 12, and so that in the forward movement of the bar I the slide will be moved with it. Upon the inside of the slide S is an inwardly-projecting shoulder, *b*, and which, when the breech-piece is in its extreme open position, stands in rear of the head of the cartridge on the breech-piece, as seen in Fig. 13, and so that as the bar I moves forward, taking with it the slide S, the shoulder *b*, striking the rear end of the cartridge, will force it forward into the barrel, as indicated in broken lines, Fig. 12.

The introduction of the cartridge to the barrel must be completed before the breech-piece commences its final rising or closing movement. The shoulder *b* therefore stands in advance of the stud N, as seen in Fig. 12; and that the slide carrying the shoulder *b* may stop its advance movement when the cartridge has been fully inserted, it is permitted a certain amount of up and down rocking movement at its rear end. The forward end of the slide corresponds to the width of the groove T, but the rear end upon its under side rides upon the end of the slide. At the rear end the slide S is constructed with an upward projection, *d*, which in the movement of the slide will ride against the upper surface of the groove T; but when in its extreme forward position this projection *d* stands beneath a corresponding notch, *e*, in the upper side of the groove. The connection between the slide and the bar T is such that an up-and-down movement is permissible to the rear end of the slide when free—that is, when the projection *d* comes below the notch *e*. The slide S therefore moves forward with the bar I from its rear position in Fig. 12 to its extreme forward position, at which time the projection *d* stands beneath the notch *e*. Then, as the further advance of the slide is prevented, because of the shoulder *b* coming against the rear end of the cartridge, or the rear end of the barrel, as the case may be, the continued forward movement of the bar I will force the rear end of the slide upward, causing the projection *d* to enter the notch *e* above, as in broken lines, Fig. 12, at which time the projection W will escape from the notch *e* in the slide, leaving the slide at rest and the bar free to pass on for its final closing movement. In this movement the projection W of the bar works on the under side of the slide S, so as to hold it in its up position, and where it will remain until on the return of the bar the projection W again comes into line with the notch *a*, when the rear end of the slide will fall and engage the bar, so as to move with it, such fall of the slide being forced by the incline at the rear end of the projection *d*, working as a cam against the rear end of the notch *e*, so that from the time of such engagement of the slide and bar the slide will be forced to move rearward in positive engagement with the bar.

To extract the cartridge a spring extractor-hook, *f*, is arranged upon the slide S, (see Fig. 12) its nose standing forward of the shoulder *b*, and so as to leave space for the flange of the cartridge between the two, as seen in Fig. 13. The nose of the extractor is beveled forward, so as to ride over the flange of the cartridge in the usual manner of extractor-hooks, and so that standing in position in rear of the cartridge-head the forward movement of the slide will force the nose of the extractor-hook over the flange of the cartridge and bring the shoulder *b* against the cartridge. Then on the return of the slide S the extractor will engage the flange of the cartridge and cause it to move rearward with the slide onto the top of the breech-piece.

The extracting movement, as well as the inserting, occurs during the passage of the stud N through the longitudinal portion L of the groove in the side of the breech-piece—that is, while the breech-piece is at rest midway between its up and down position. Therefore there being a cartridge or exploded shell in the barrel when the breech-piece is closed, the breech-piece is dropped to its intermediate position, and then the shell is drawn from the barrel above the breech-piece, from which it must be removed before the breech-piece descends to receive a cartridge from the magazine. This removal may be made by hand; but that it may be automatically done I hang a lever, *g*, upon one side of the breech-piece, the pivot *h* of the lever being at the rear, the free end forward. From this lever there is an inwardly-projecting finger, *i*, which, when the breech-piece is up, lies in a recess in the top of the breech-piece, as seen in Fig. 2, and so that as the cartridge is drawn from the barrel onto the breech-piece it will stand upon that inwardly-projecting finger. Then as the breech-piece commences its descent the rear end of the lever G below its pivot strikes a shoulder or stud, *l*, in the side of the receiver, as seen in Fig. 11, which arrests the further descent of the lever *g*, with the breech-piece, and as the breech-piece descends causes the lever to turn upon its pivot and raise its forward end, and the finger *i*, beneath the shell, then on the breech-piece, imparts a throw to the shell, as indicated in Fig. 11, sufficient to eject the shell; and while the lever *g* with its finger is so rising, as seen in Fig. 5, the breech-piece passes to its lowest position, to receive a cartridge from the magazine, and this cartridge passes onto the breech-piece beneath the finger *i*, as seen in Fig. 5. Then as the breech-piece rises a spring, *m*, (see Fig. 7,) causes the lever *g* to turn downward and bring its finger *i* with a yielding pressure upon the upper surface of the cartridge, and so as to hold it upon the breech-piece and prevent its displacement in the quick ascent of the breech-piece, so that when the breech-piece is raised

to the midway position, with the cartridge in line with the barrel, the finger *i* of the lever still rests upon the cartridge, but yieldingly, so that as the cartridge is moved forward, as before described, it will readily pass from beneath the finger to its place in the barrel, and then the spring *m* will force the lever *g* to its down or home position before the breech-piece commences its final upward or closing movement. Thus the lever *g* serves the double purpose of holding a cartridge upon the breech-piece during its transfer from the magazine to a position in rear of the barrel and as an ejector for the exploded shell drawn from the barrel onto the breech-piece.

The hammer is arranged in the breech-piece, and consists of a spindle, *n*, arranged in a longitudinal recess, *r*, in the breech-piece, its forward end forming a firing-pin, *s*, adapted to pass through a corresponding opening, *t*, in the breech-piece, as seen in Fig. 6, and the spindle is provided with a spring, *u*, arranged to force the hammer forward to the striking position when free. The spindle is constructed with a lateral projection, *w*, so far through the side of the breech-piece as to stand in the path of the stud N on the bar I, and so that as the bar moves rearward, as indicated in broken lines, Fig. 6, the stud N will strike the lateral projection *w*, and then in its continued movement will force the hammer to its full-cocked position, as indicated in broken lines, Fig. 6. When the hammer has reached its cocked position, it is engaged by the nose of a sear, 2, hung in the breech-piece, as seen in Fig. 5. The tail 3 of the sear extends downward from the pivot, and is provided with a spring, 4, which is adapted to force the sear into yielding engagement with the hammer, and so as to hold the hammer in its full-cocked position. The sear swings with the breech-piece in its opening and closing movement. In the closing movement the tail 3 comes into the path of the trigger 5, hung in the receiver below, as seen in Fig. 4, and so that the pull of the trigger will turn the sear and release the hammer, to permit it to fly forward under the action of its spring to strike the primer; but because the sear is hung in the breech-piece and moves with it, it follows that in the first part of the opening movement of the breech-piece the sear is taken out of the path of the trigger, and also that the hammer cannot be released until the breech-piece is substantially closed, and so as to bring the tail 3 of the sear into possible engagement with the trigger.

As a protection against accidental release of the hammer when cocked, we provide a stop to set against the tail of the sear when the breech-piece is closed, and this stop is best arranged in the form of a two-armed lever, 6 7, hung upon a pivot, 8, in rear of the tail of the sear, as seen in Fig. 4. The arm 6 extends up through the tang D, and is provided with a suitable handle, 9, by which the lever may be turned upon its pivot, the said handle working through a slot, 10, in the tang. When moved forward, as seen in Fig. 9, the lower arm, 7, stands below the bearing-point 11 on the sear, and so that in that condition the sear is free for the action of the trigger; but when the lever 6 7 is thrown to the rear then the arm 7 is raised into a position in rear of the bearing-point 11 on the tail of the sear, and so as to hold it in its engaged position with the hammer, and prevent possible movement of the sear from such engagement while the lever stands in that position. The operator seeing the lever in its forward position knows that the sear is free for the action of the trigger, but when drawn to the rear he knows that the sear is locked and that discharge is impossible.

The arm 6 of the lever is provided with a spring, 12, to hold it in either of its two positions. When the lever 6 7 is in the position of locking the sear, as described, it also securely locks the breech-piece in its closed position, for the reason that so long as the arm 7 stands in rear of the tail of the sear the breech-piece cannot be turned downward; but when turned out of the path of the tail of the sear, as seen in Fig. 4, then not only is the sear free, but the breech-piece is also free.

It may be desirable to provide means for automatically engaging the breech-piece with the bar I when the breech-piece is closed, so as to prevent accidental displacement of the breech-piece. This is effectively done by the introduction of a spring-catch, 13, in the groove in the breech-piece in line with the stud N when the breech-piece is in its closed position; and, as seen in Fig. 9, the end of the spring-catch is of conical shape, and the stud N has a corresponding recess upon its inner end, so that as the bar approaches its extreme forward movement and the breech-piece its extreme up position the point of the spring-catch is forced inward by coming in contact with the stud N on the bar, and so as to permit the stud N to pass to its home position. Then the spring-catch is forced outward into engagement with the stud N, so as to yieldingly hold the breech-piece in its up or closed position.

The peculiar construction of the breech-piece and its connection with the handle forward, whereby the up and down swinging movement is imparted to the breech-piece and the intermediate rest, may be employed in arms of this class in which the hammer is otherwise arranged—that is, in which there is the common sliding firing-pin adapted to be struck by the hammer at the rear—a common and too well-known arrangement to require illustration or description.

The arrangement of the hammer and its sear in the breech-piece, and so as to swing up and down with it, may be employed in arms in which the breech-piece is arranged to swing up and down in like manner, but without the intermediate rest, and is thus adapted to breech-loading fire-arms. This modification is too apparent to require illustration.

The slide S, whereby the cartridge is forced into the barrel and the extractor engaged therewith, arranged to be disconnected from the reciprocating rod before the rod completes its extreme forward movement, may be employed in arms of this class, in which the longitudinal movement of the bar is otherwise communicated to the breech-piece, so as to produce its up and down swinging movement.

We are aware that the arrangement of a breech-piece hung in the receiver in rear of the barrel, so as to swing downward and backward in opening to a position below the mouth of the magazine to receive a cartridge from the magazine upon its upper surface, and the said breech-piece arranged to rest at a point midway between its extreme open and closed positions while the cartridge is in line with the barrel, and so that the cartridge may be moved from the breech-piece into the barrel, is not new, and therefore do not claim, broadly, such an arrangement of breech-piece; but

What we do claim is—

1. In a magazine fire arm, the combination of a barrel, a magazine beneath the barrel, both open into the receiver at the rear, a breech-piece hung in the receiver in rear of the barrel and so as to swing downward and backward in opening to a position below the magazine, a sliding guided handle forward of the receiver, and a bar extending therefrom into the receiver and so as to work in a path parallel with the side of the breech-piece, the breech-piece constructed with a longitudinal groove terminating at its forward end in a downward and forward incline, and at its rear end terminating in an upward and rearward incline, the said bar provided with a stud adapted to work in said groove, substantially as described, and whereby in the rear and forward movement of said slide the said stud operates to drop and raise the breech-piece, but hold it at a position of rest midway between its down and up positions, substantially as described.

2. In a magazine fire-arm in which the magazine is arranged beneath the barrel and both the barrel and magazine open into the receiver at the rear, a breech-piece hung in the receiver in rear of the barrel and arranged to swing downward and upward in its opening and closing movements, a guided handle arranged beneath the barrel forward of the receiver, a bar extending from said handle into the receiver and in connection with the breech-piece, whereby under the reciprocating movement of the handle the opening and closing movement is imparted to the breech-piece, a slide, S, arranged in a groove, T, in the side of the receiver parallel with the said bar, the said slide constructed with a shoulder, *b*, and the said bar and slide, the one constructed with a notch, *a*, and the other with a corresponding projection, W, the said slide also constructed with an upward projection, *d*, and the receiver with a notch, *e*, in the side of the groove corresponding to the said projection *d* on the slide, when the slide is in its forward position, substantially as and for the purpose described.

3. In a magazine fire-arm in which the magazine is arranged beneath the barrel and both the barrel and magazine open into the receiver at the rear, a breech-piece hung in the receiver in rear of the barrel and arranged to swing downward and upward in its opening and closing movement, a guided handle arranged beneath the barrel forward of the receiver, a bar extending from said handle into the receiver and in connection with the breech-piece, whereby, under the reciprocating movement of the handle, the opening and closing movement is imparted to the breech-piece, a slide, S, arranged in a groove, T, in the side of the receiver parallel with the said bar, an extractor-hook on said slide, and the said bar and slide, the one constructed with a notch, *a*, and the other with a corresponding projection, W, the said slide also constructed with an upward projection, *d*, and the receiver with a notch, *e*, in the side of the groove corresponding to the said projection *d* of the slide, when the slide is in its forward position, substantially as and for the purpose described.

4. In a magazine fire-arm having the magazine arranged beneath the barrel and both the barrel and magazine opening into the receiver at the rear, the breech-piece hung in the receiver in rear of the barrel and so as to swing downward and backward in opening to a position below the magazine, and so that the rear cartridge in the magazine may pass onto the upper side of the breech-piece, a reciprocating handle forward of the receiver, a bar extending therefrom into the receiver and arranged to work in a corresponding groove in the side of the breech-piece, whereby the up and down swinging movement is imparted to said breech-piece, the said groove being constructed of an inclined shape at its forward and rear ends, the intermediate portion being longitudinal to permit a rest of the breech-piece midway of its up and down position, a lever, *g*, hung on one side of the breech-piece upon a pivot below the pivot upon which the breech-piece is hung, the said lever constructed with a finger, *i*, extending inward onto the upper face of the breech-piece, a spring, *m*, between the said breech-piece and lever, and a shoulder, *l*, in the receiver in rear of said lever and at a point below the pivot on which the lever is hung, substantially as and for the purpose described.

5. In a fire-arm in which the breech-piece is hung in the receiver in rear of the barrel, so as to swing downward and upward in opening and closing, a reciprocating handle forward of the receiver, a bar extending therefrom into the receiver and so as to receive the reciprocating movement of the handle, the said bar arranged to impart said opening and closing movements to the breech-piece, a sliding hammer and its mainspring arranged in said breech-

piece, with a lateral extension from the hammer into the path of said bar, and whereby the rear movement of the bar will impart a forced rear movement of the hammer to its cocked position, and a sear hung in said breech-piece and arranged to engage the hammer when at full-cock with a trigger by which the said sear may be discharged, substantially as described.

6. In a fire-arm in which the breech-piece is hung in the receiver in rear of the barrel, so as to swing downward and upward in opening and closing, a reciprocating handle forward of the receiver, a bar extending therefrom into the receiver and so as to receive the reciprocating movement of the handle, the said bar arranged to impart said opening and closing movements to the breech-piece, a sliding hammer and its mainspring arranged in said breech-piece, with a lateral extension from the hammer into the path of said bar, and whereby the rear movement of the bar will impart a forced rear movement of the hammer to its cocked position, a sear hung in said breech-piece and arranged to engage the hammer when at full-cock, the said sear constructed with a tail at the rear of its pivot, and a stop arranged in the receiver movable into or from the path of the tail of the sear, substantially as described.

7. In a fire-arm in which the barrel is open into the receiver at the rear, a breech-piece hung in rear of the barrel, so as to swing downward and upward in its opening and closing movements, a sliding handle arranged beneath the barrel forward of the receiver, a bar extending from the said handle into the receiver, the breech-piece constructed with a groove in its side, through which a stud on said bar will work, and whereby, under the backward and forward movement of the handle, the opening and closing movement is imparted to the breech-piece, and a spring-catch between said breech-piece and bar adapted to interlock the bar and breech-piece when the breech-piece is in its closed position, substantially as described.

JOHN M. BROWNING.
MATTHEW S. BROWNING.

Witnesses:
MILES G. JONES,
CALEB PARRY.