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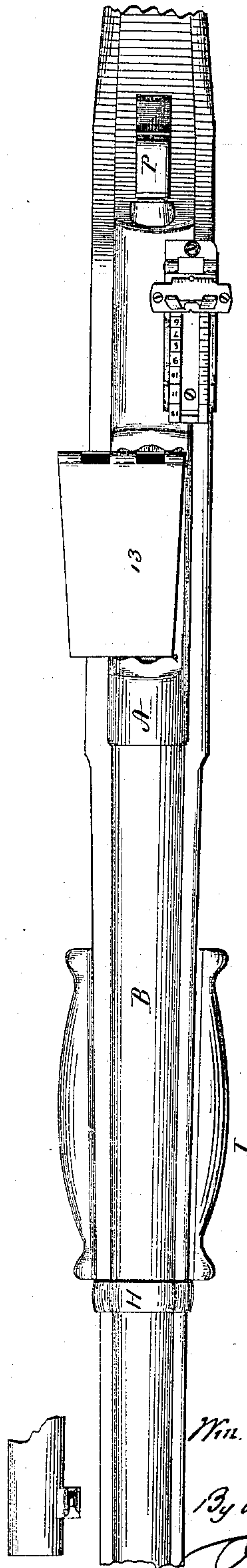
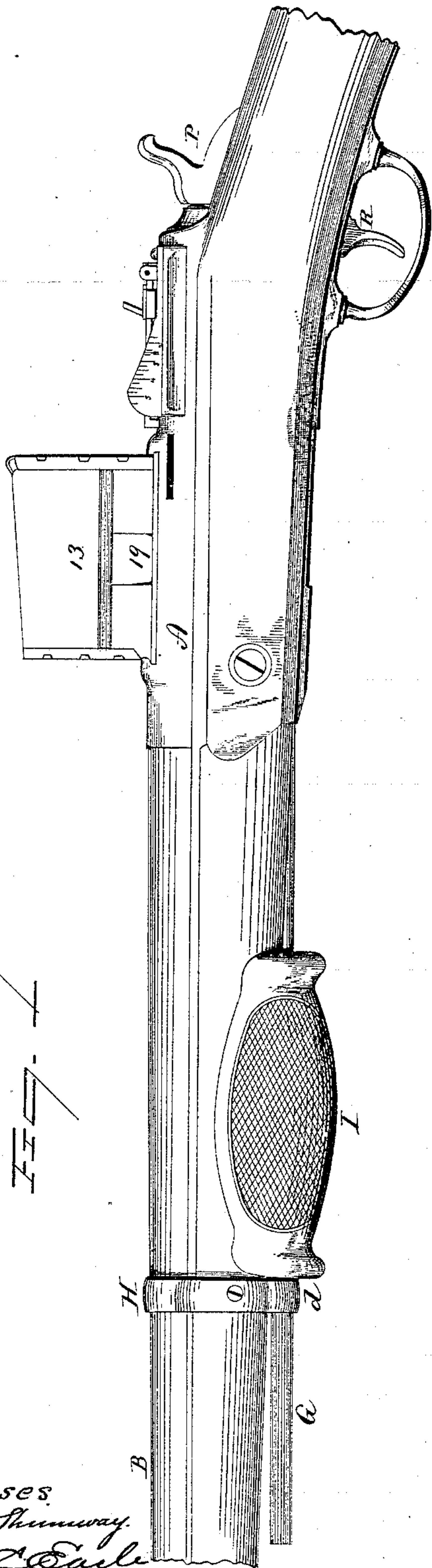
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W. B. FRANKLIN.

MAGAZINE FIRE ARM.

No. 314,823.

Patented Mar. 31, 1885.



Witnesses
J. H. Shumway
J. C. Earle

Wm. B. Franklin
Inventor
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(No Model.)

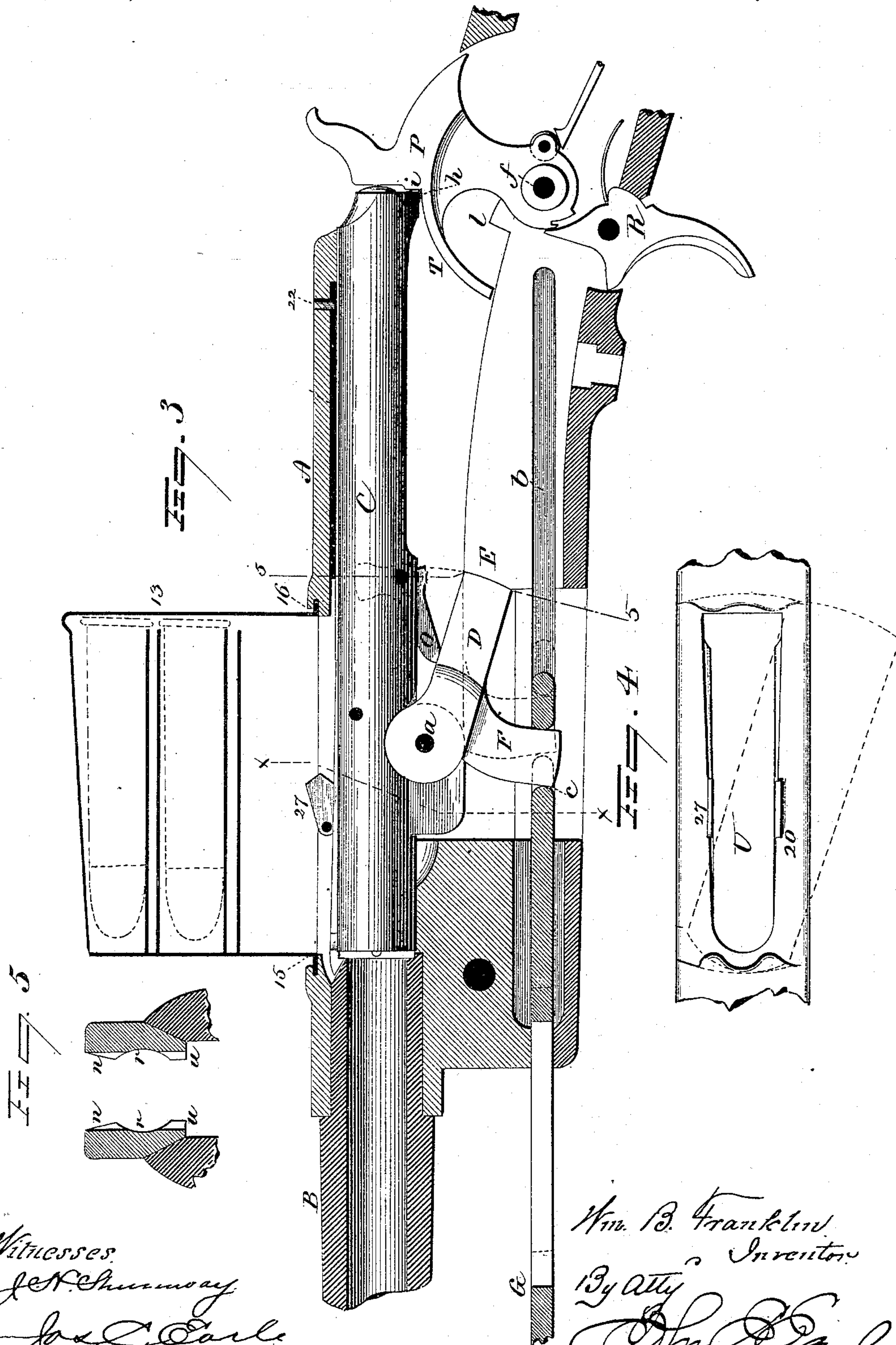
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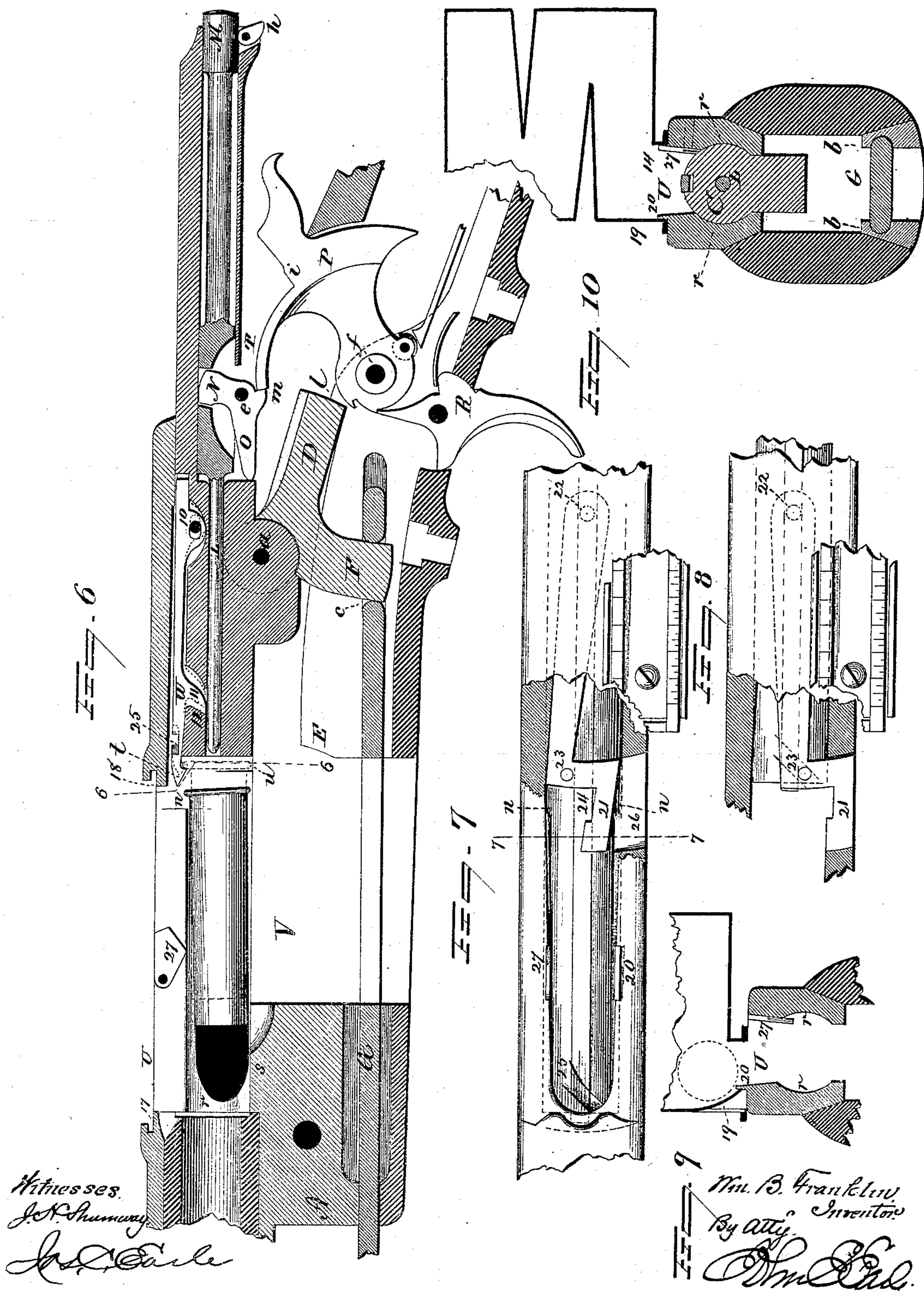
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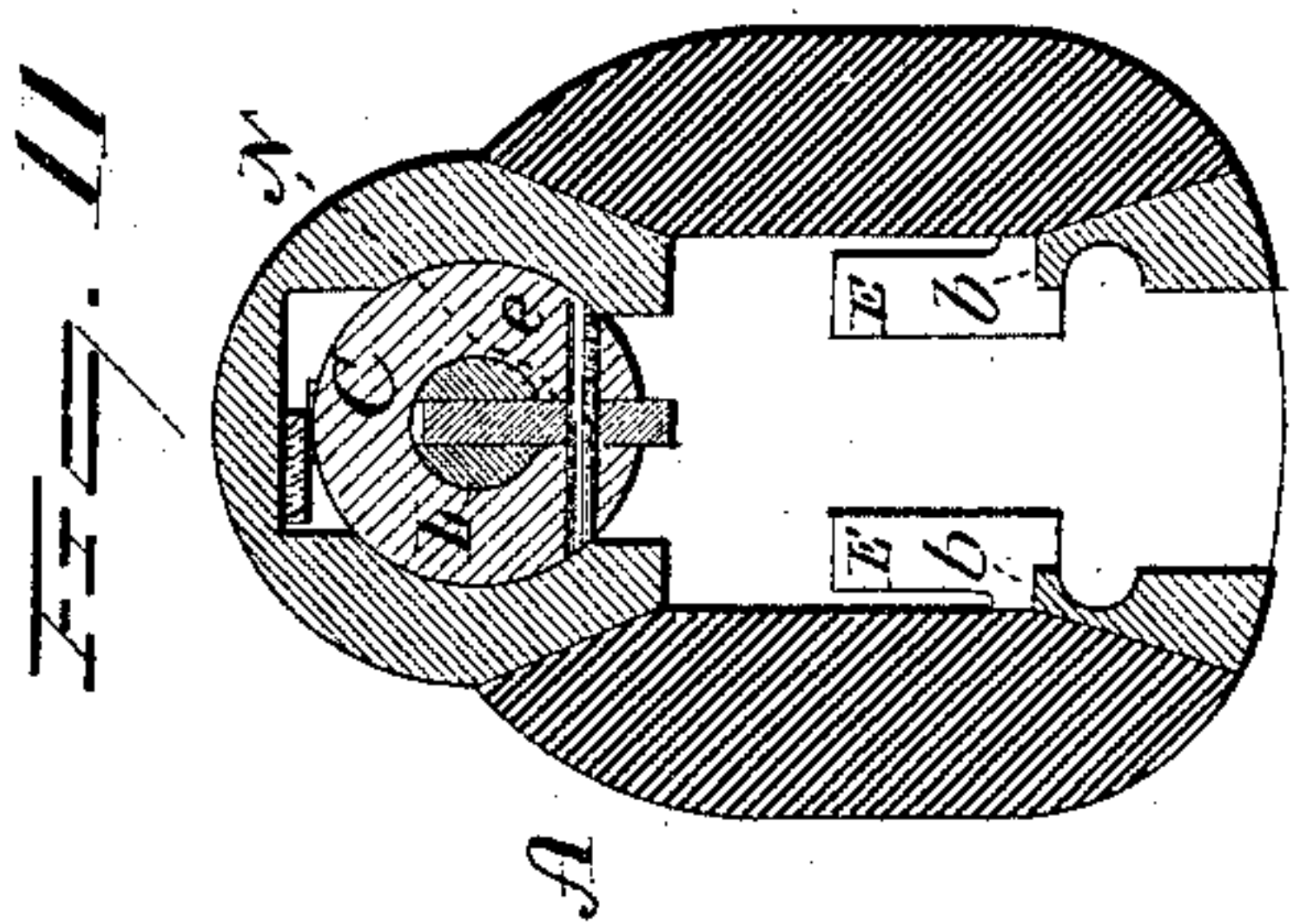
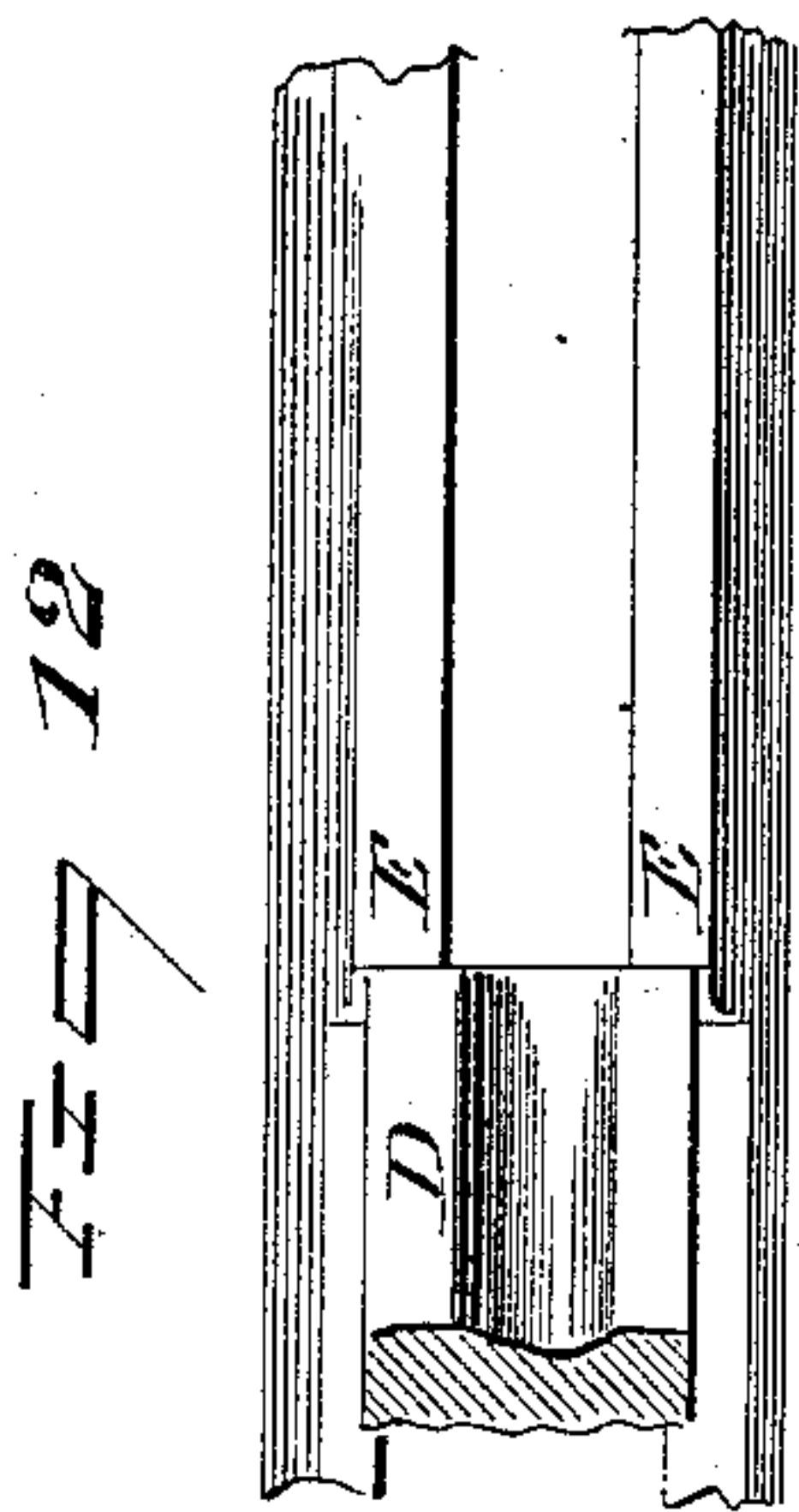
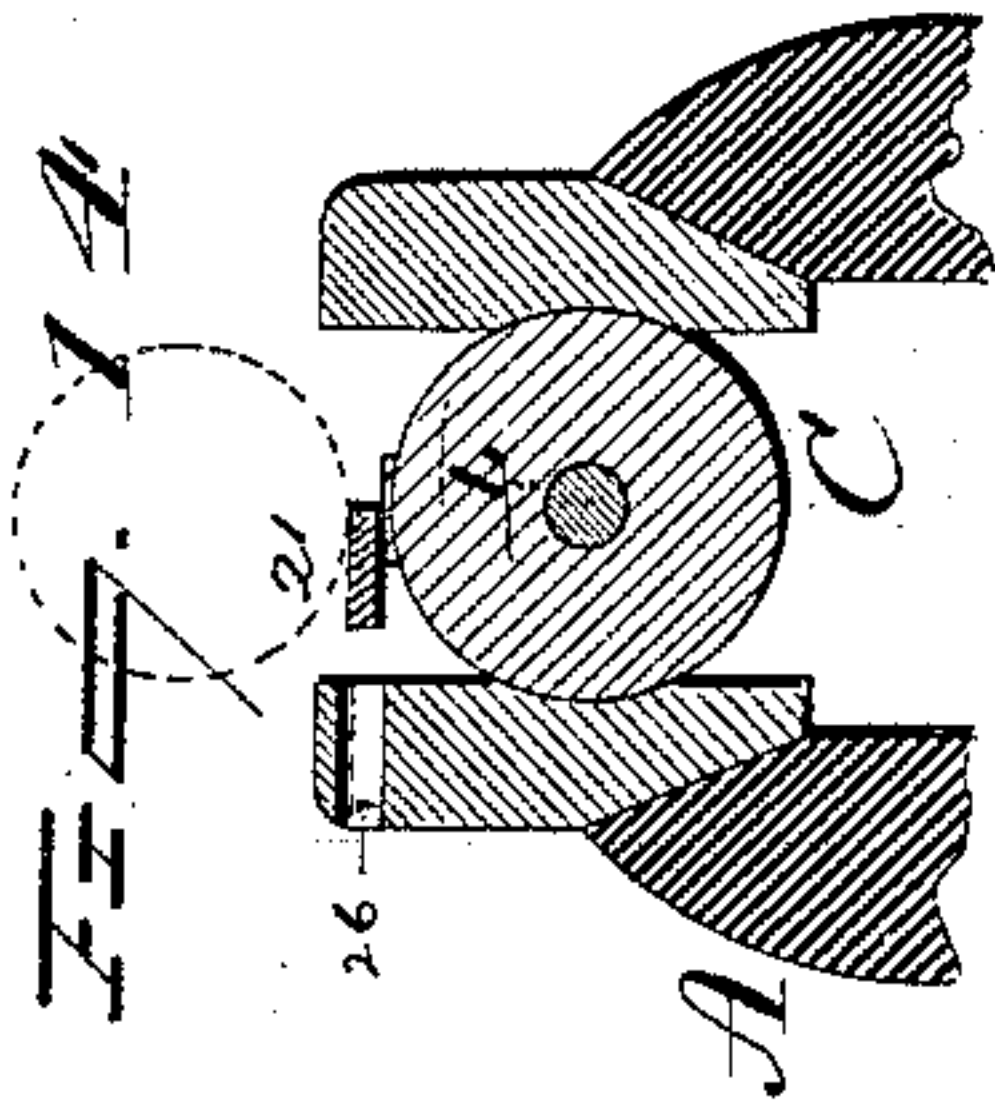
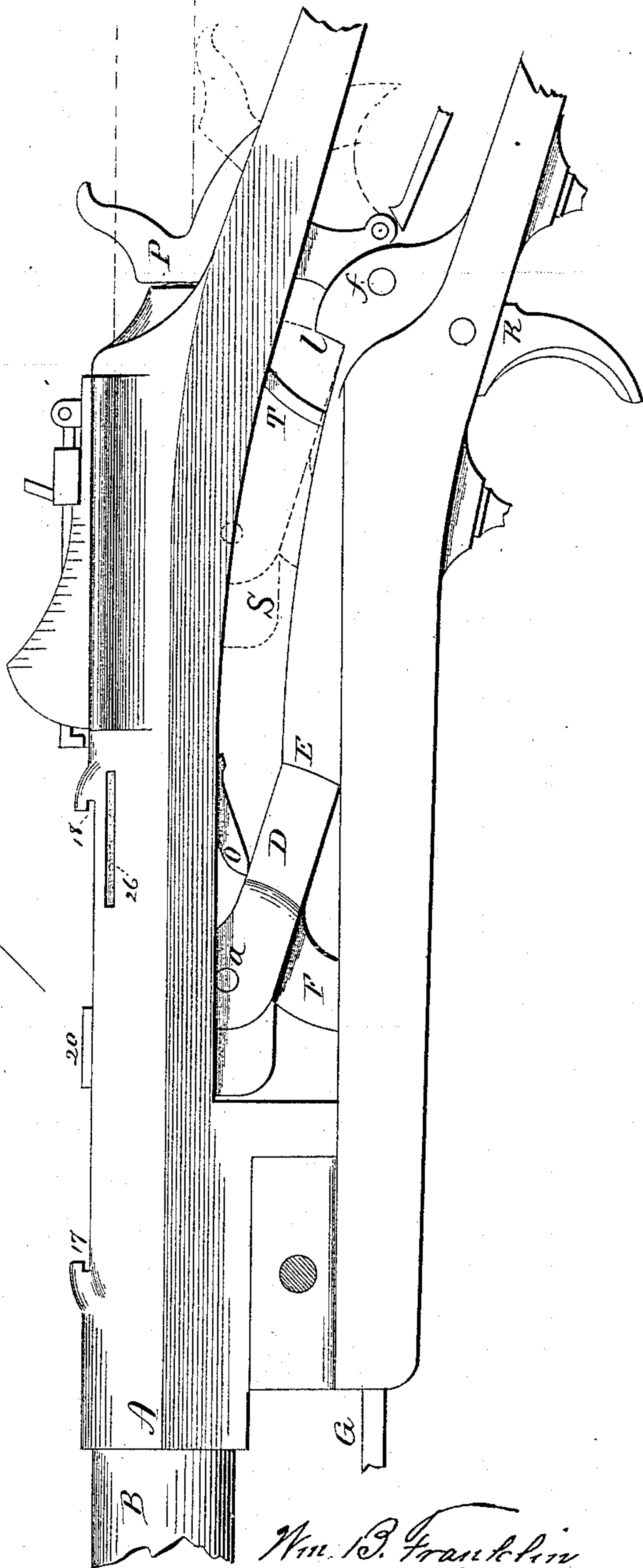


Fig. 13



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UNITED STATES PATENT OFFICE.

WILLIAM B. FRANKLIN, OF HARTFORD, CONN., ASSIGNOR TO COLTS PATENT
FIRE ARMS MANUFACTURING COMPANY, OF SAME PLACE.

MAGAZINE FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 314,823, dated March 31, 1885.

Application filed October 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. FRANKLIN, of Hartford, in the county of Hartford and State of Connecticut, have invented new
5 Improvements in Magazine Fire-Arms; and I 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
10 the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, a top view; Fig. 3, a longitudinal sectional side view; Fig. 4, a top view showing the mouth of the
15 receiver and the method of applying the magazine; Fig. 5, a vertical section through the receiver forward of the front face of the breech-piece in its open condition and on line 6 6 of Fig. 6; Fig. 6, a longitudinal central sectional
20 side view showing the breech-piece in its open condition and a cartridge as standing in the auxiliary chamber preparatory to its entrance into the chamber of the barrel, broken lines indicating the shell as withdrawn by the
25 opening of the breech-piece; Figs. 7 and 8, horizontal sectional views showing the operation of the check; Figs. 9 and 10, vertical sections illustrating the application of the magazine; Fig. 11, a transverse section on line 5 5
30 of Fig. 3, looking rearward, and showing the shoulder E, against which the dog abuts in locking the breech-piece; Fig. 12, a longitudinal section of the dog, showing the shoulders E and the recess in the upper face of the dog;
35 Fig. 13, a side view showing the receiver and mechanism of the arm with the stock removed, black lines showing the position of the parts as the hammer arrives at full-cock; Fig. 14, a vertical transverse section on line
40 7 7 of Fig. 7, showing the check 21 in its two positions in full lines in the mouth of the receiver, and broken lines out of the receiver.

This invention relates to an improvement in that class of breech-loading fire-arms in
45 which the breech-piece is arranged at the rear of the barrel and in axial line therewith, and so as to be moved backward in opening and forward to close the breech, and to which a case containing several cartridges may be ap-
50 plied over an opening in the receiver, so that

the cartridges will successively fall in front of the breech-piece when in its rear position, and be forced into the cartridge-chamber by the forward movement of the breech-piece, and also in which the breech-piece is operated
55 by a handle forward of the receiver, beneath the barrel, arranged to move longitudinally backward and forward parts of the invention applicable to other classes of arms, the object of the invention being to adapt the arm to re-
60 ceive the case or magazine on the top of the receiver, the magazine being readily attached to or removed from the receiver as occasion may require, and so that the arm may be used either as a breech-loader or as a magazine-re-
65 peater; and the invention consists in the combination of elements fully hereinafter described and particularly recited in the claims.

A is the receiver, to the forward end of which the barrel B is attached. In the re-
70 ceiver, in rear of the barrel, the breech-piece C is arranged in axial line with the barrel, and so as to move backward in opening the breech to the position seen in Fig. 6, or forward to close the breech, as seen in Fig. 3. 75

To the under side of the breech-piece the locking-dog D is hung upon a pivot, *a*, and so that when the breech-piece is forward the dog will drop down in front of and against a shoulder, E, in the receiver, as seen in Fig. 3, and
80 so as to hold the breech-piece in its locked position, but so that when the dog is raised, as indicated in broken lines, Fig. 3, the dog escapes from the shoulder E, unlocks the breech-piece, and so that the breech-piece may then
85 be moved rearward, as indicated in Fig. 6. The upper face of the dog is recessed to permit it to thus rise beneath the breech-piece, as seen in Figs. 11 and 12. On the under side of the dog D is a downwardly-extending arm, 90
F, by which the dog is operated. Below the dog is a longitudinal sliding bar, G, arranged in longitudinal guiding-grooves *b* in the receiver, (see Figs. 3, 6, and 10,) the arm F extending down through an opening, *c*, in the
95 bar G near its rear end, and as seen in Fig. 3. The bar G extends forward through the receiver beneath the barrel, its forward end passing through a guide, *d*, formed in the under side of a band, H, around the barrel and 100

fore arm. To this bar a handle, I, is fixed, by which the bar may be conveniently moved backward and forward, the bar guided by grooves *b* in the receiver and by the guide *d* at the forward end. As the bar is moved rearward from the position seen in Fig. 3 to that in Fig. 6 the first part of the rear movement raises the dog, as indicated in broken lines, Fig. 3, to take it from its locking position and above the shoulder E. Then, the rear movement of the bar G continued, the breech-piece will be forced to its extreme rear position, as seen in Fig. 6. On the return of the bar G by the forward movement of the handle the breech-piece will be forced to its forward position and the dog turned down forward of the shoulder E, and so as to lock the breech-piece in its closed position. The shoulder E is formed in two parts, as seen in Fig. 12, the arm F of the dog passing between the parts of the shoulder in its back and forward movement.

Longitudinally through the breech-piece is the firing-pin L. This extends to the extreme rear, where it terminates in a head, M, upon which the hammer may strike.

In the breech-piece, above the dog D, a bell-crank lever is hung upon a pivot, *e*, one arm, N, extending upward into a recess in the breech-piece, the other arm, O, extending forward, and so that when the breech-piece is in its closed position and the firing-pin forced forward under the blow of the hammer the arm O will hang down over or upon the dog D, and so that when the dog D rises, as in the first part of the rear movement of the bar G, it will strike the arm O and turn the arm N backward and force the firing-pin to retreat, as seen in Fig. 6. Thus the firing-pin retreats before the rear movement of the breech-piece commences.

P is the hammer, hung upon a pivot, *f*, in the usual manner, and so as to engage the trigger R when thrown to half or full cock; as seen in Fig. 6, also a usual construction.

As the breech-piece commences its rear movement a tongue, *h*, pivoted in the rear end of the breech-piece, strikes a corresponding shoulder, *i*, on the hammer and forces the hammer rearward to the full-cock position, as seen in broken lines, Fig. 13, at which time the tongue *h* escapes from the hammer, leaving it at full-cock, the breech-piece passing on to its extreme rear position, as seen in Fig. 6. As the dog D moves backward, carrying the breech-piece with it, it rides upon the under side, S, of the upper tang, which gives it a downward turn upon its pivot, until it arrives against a shoulder, *l*, as seen in Fig. 6, which arrests the further rear movement of the breech-piece.

On the forward side of the hammer, and below the breech-piece, is an arm, T, concentric with the axis upon which the hammer rotates, the forward end of which rises as the hammer is turned to its rear position, and as seen in Fig. 6.

On the hub of the firing-pin lever O N is a shoulder, *m*, which, at the extreme rear position, strikes the end of the said arm T, which holds the lever O N in the position of retracting the firing-pin, notwithstanding the fact that the dog D has been turned down away from the arm O. Thus the firing-pin is forcibly held in its extreme rear position while the breech-piece is open; but as the breech-piece is moved forward the shoulder *m* will leave the arm T of the hammer; but as the dog D rises, following the upward curved surface from the shoulder *l* at the rear to the locking-shoulders E, it will hold the lever and firing-pin, and so that when the breech-piece arrives at its extreme forward position the firing-pin will be left in its position of retreat as the dog D is thrown down into its locking position, and will there remain until the hammer is released to strike the firing-pin to deliver the blow of the hammer to the cartridge that may be in the cartridge-chamber of the barrel.

On the top of the receiver, and immediately in rear of the barrel, is an opening, U, corresponding substantially in shape to the cartridge for which the arm is adapted, and so that the cartridge may be introduced through the opening U to a position in front of the open breech-piece, as seen in Fig. 6. The opening U is narrower than the diameter of the head of the cartridge, but slightly wider than the body of the cartridge; but at the extreme rear end of the opening a recess, *n*, is cut in each side to widen the opening at that point to the extent of the diameter of the head, and so that the head may drop down through the recesses *n*, as seen in Fig. 6.

Below the opening U the sides of the receiver are recessed, as at *r r*, Figs. 9 and 10, to form a chamber or seat for the cartridge, and through which the head of the cartridge may pass in the forward movement of the breech-piece to take the cartridge into the chamber in the barrel. Below this cartridge-receiving chamber is an opening, V, downward entirely through the receiver; but this opening is shorter than the cartridge, leaving a solid bottom, *s*, at the forward end of the auxiliary chamber, upon which the forward end of the cartridge will rest, and so that when in the auxiliary chamber, as seen in Fig. 6, the forward end of the cartridge will rest upon this solid bottom *s*, while the rear end will be supported by the head lying in the recesses *r r*.

In the extreme rear position of the breech-piece, as seen in Fig. 6, it stands to the rear of the head of the cartridge when placed in the auxiliary chamber, as seen in Fig. 6, the breech-piece being prevented from contact with the head of the cartridge by the forward end, *t*, of the extractor W. In this condition, as the breech-piece commences its forward movement the forward end of the extractor-hook will strike the head of the cartridge and give to it a forward movement until, arriving at its extreme forward position in the barrel, the resistance of the cartridge to enter-

ing the chamber will cause the hook to rise and pass over the flange of the cartridge, and so as to engage the cartridge, that when the breech-piece is withdrawn it may take the cartridge-shell with it, as seen in broken lines, Fig. 6. As the shell comes back with the breech-piece the head moves to a position considerably in rear of the position of the head of the cartridge when introduced into the auxiliary chamber, as before described, and as seen in broken lines, Fig. 6. At this point the head of the cartridge passes into the recesses *u*, as seen in broken lines, Fig. 6. These recesses, as seen in Fig. 5, leave a space somewhat greater in width than the head of the cartridge-shell, and so that the head of the cartridge-shell, arriving at these recesses, may pass downward into the opening *V* away from the extractor-hook, and so as to escape from the arm, the opening *V* being of sufficient length to permit such escape of the cartridge-shell. It will therefore be seen that as a cartridge is placed in the auxiliary chamber, as seen in Fig. 6, and preparatory to its introduction into the chamber in the barrel, the head rests in the recesses *r r* in the sides of the receiver, so as to prevent its entering the opening *V*, and also to prevent its escape from the arm, because of the overhanging of the upper edges of the recesses *r r*; but when the shell is withdrawn from the chamber after explosion, or the cartridge if it be not exploded, the cartridge will be moved so much farther to the rear than its introduced position that its head will come into the recesses *u*, as indicated in broken lines, Fig. 6, and so that the shell, or cartridge, if it be not exploded, will fall downward through the opening *V*, and away from the arm.

The extractor shown in the illustrations is that for which Letters Patent were granted to C. B. Richards, August 18, 1868, No. 81,290, and in which the movement of the extractor in riding over the flange of the cartridge and engaging it is made positive without the employment of a spring. Near its rear end it is hung upon a pin, 10, there being a slot through the extractor to permit a certain amount of longitudinal movement of the extractor on the pin 10. In Fig. 6 the extractor is shown in the extreme forward position. Near the forward end is a downwardly-projecting lug, 11, inclined downward and forward on the front face, and in the breech-piece is a correspondingly-inclined shoulder, 12. As the breech-piece advances, the nose of the extractor will strike the head of the cartridge and force it rearward, as indicated in broken lines, Fig. 6, taking the inclined face 11 of the extractor away from its shoulder, and so that in the advance of the cartridge into the chamber in the barrel the extractor-hook will ride over the flange of the cartridge whenever the resistance to the entrance of the cartridge into its chamber is sufficient to raise the hook. Then when the breech-piece commences its retreat the cartridge or shell of the cartridge in its seat

in the barrel will hold the extractor, while the breech-piece starts in its rear movement; but so soon as the inclined shoulder 12 strikes the inclined face of the lug 11 it holds the extractor down upon the cartridge, so that the cartridge or shell must follow the breech-piece in its retreating movement, the inclined shoulder locking, as it were, the extractor in its down or engaged position.

While illustrating and by preference employing the Richards extractor, it will be understood that the common spring-extractor may be substituted therefor.

As thus far described the arm operates as a breech-loader. I will now proceed to describe its adaptation as a magazine fire-arm.

The magazine 13, adapted to this arm, and which I illustrate, is a construction for which I have applied for Letters Patent, application Serial No. 135,232. It is arranged with several partitions, as seen in Fig. 10, alternately extending from opposite sides, inclined downward toward the mouth 14, as seen in Fig. 10, so as to form a circuitous passage, which may be filled with several cartridges, and so that when the mouth is downward they will successively fall through the mouth as one is taken from the mouth. The magazine is filled with cartridges with the mouth upward, and is then inverted over the opening *U* in the receiver, as seen in Fig. 10, and so that the cartridges may successively fall through the mouth in front of the breech-piece when the breech-piece is in its open position.

The magazine is constructed with an outwardly-projecting flange, 15, at the forward end of the mouth, and a like projecting flange, 16, at the rear end of the mouth. (See Fig. 3.) The receiver is constructed with a horizontal groove, 17, at the forward end of the opening *U*, and a similar groove, 18, at the rear, these two grooves corresponding to the flanges 15 and 16 on the magazine, and so that the magazine may be passed in sidewise, the flanges entering, respectively, the grooves 17 and 18, and when in proper position the mouth of the magazine corresponds to the opening *U*, as seen in Figs. 3 and 10.

The magazine is constructed at one side of the mouth with a spring-tongue, 19, which, when free, turns inward, as seen in Fig. 9, and so as to serve as a stop to prevent the cartridges in the magazine from escaping, and so that the magazine filled with cartridges may be transported without danger of cartridges escaping. It is necessary, therefore, as the magazine is applied to the arm, to remove or displace the tongue 19, in order that the cartridges may fall from the mouth into the auxiliary chamber in the receiver. To this end the receiver is constructed with an upwardly-projecting lug, 20, (see Figs. 4, 9, and 10,) and which stands in the path of the tongue as the magazine is introduced from one side.

The introduction of the magazine is indicated in Fig. 4 in broken lines, the flange of the forward end being set into the groove 17.

The rear end is then turned to place in the groove 18. In so doing the spring-tongue 19 strikes the lug 20, as seen in Fig. 9, and as the magazine approaches its place the spring-tongue is bent outward into a plane with that side of the magazine, as seen in Fig. 10, so that the mouth of the magazine is left entirely open for the escape of the cartridges, and each cartridge will escape therefrom into the auxiliary chamber below whenever that chamber is opened by the movement of the breech-piece. The first advance or closing movement of the breech-piece forces the first cartridge into its chamber in the barrel. Then withdrawing it, the shell or cartridge, if it be not exploded, will escape through the opening V below. Then the next cartridge from the magazine will fall into place, and so on until all the cartridges in the magazine have been discharged. Then the magazine is removed and a second filled magazine applied; or the magazine removed may be refilled with cartridges and replaced.

In order that the next cartridge in the magazine may not interfere with the previous cartridge, which has fallen into the auxiliary chamber, in its forward or rear movement, I provide a check which will hold back the column of cartridges in the magazine until the breech-piece is fully open. This check 21 is in the form of a lever hung upon a pivot, 22, to swing in a horizontal plane directly above the breech-piece. (See Figs. 7, 8, and 14.) The check, when the breech-piece is forward, stands over the breech-piece, as seen in Figs. 7 and 14, and below the lowest cartridge in the magazine, or across the mouth of the magazine, and so as to hold back the column of cartridges.

On the under side of the check-lever is a stud, 23, which rides upon, say, the right-hand side of a rib, 24, on the breech-piece, and this rib forms in shape a continuation of the extractor, and as seen in Fig. 7.

Near the forward end of the breech-piece is a diagonal groove, 25, across its upper surface and across the extractor, as seen in Fig. 7. As the breech-piece approaches its rear position this groove engages the stud 23 on the check, and the continued rear movement forces the check from the position seen in Fig. 7 to that seen in Fig. 8, and to the position seen in broken lines, Fig. 14, the check entering a mortise, 26, in the side of the receiver prepared for it, and so as to leave a free passage between the mouth of the magazine and the auxiliary chamber in the receiver. When so opened, the lowest cartridge in the magazine will fall into its place in the receiver, as seen in Fig. 6. Then as the breech-piece is returned the stud 23 returns through the groove 25 in the breech-piece, and thereby forces inward the check to the position seen in Figs. 7 and 14, between the cartridge which has so fallen into the receiver and the next cartridge above. The inward movement of the check between the cartridge in the auxiliary chamber and the first cartridge above will raise

the upper cartridge away from the cartridge in the chamber, as seen in Fig. 14, and so as to prevent a clash between the flanges of the two cartridges, and also to prevent the breech-piece from striking the head of the second cartridge, or any interference of said second cartridge in the working of the arm.

In this arrangement of the magazine, because of the opening into the receiver being directly in line with the breech-piece, the magazine will stand in the central line of the barrel, and would therefore be in line with the sights as usually arranged. I therefore arrange the sights at one side of the central line, as seen in Fig. 2, so that the line of sight is to the left of the magazine, and as clearly seen in Fig. 2.

The tendency of the spring-tongue 19 bearing against a lug, 20, on the receiver would be to turn the magazine from its place over the receiver, and this tendency will be increased to a considerable extent by the shock in firing. To prevent such turning out of place of the magazine, I provide a lock for the magazine. This consists of a turn-button, 27, hung in the side of the mouth of the receiver opposite the lug 20, and as seen in Fig. 6, which, when the breech-piece is in its open position, as seen in Fig. 6, will stand down flush with the upper surface of the receiver at that point; but in the closing movement of the breech-piece it will strike the turn-button 27 and turn it up inside the mouth of the magazine, as seen in Figs. 3 and 10, and so that when the breech-piece is closed the magazine is positively locked in its place on the arm, and from which it cannot be disengaged without first opening the breech-piece. The spring-tongue 19 prevents the escape from one side and the turn-button 27 from the opposite side.

The tongue *h*, hung in the rear end of the breech-piece so as to act upon the hammer in its rear movement, permits the hammer to be thrown to a position to entirely escape contact with the moving breech-piece after the tongue has passed from the hammer, and so in returning there will be no conflict or contact between the breech-piece and hammer, the tongue turning up to pass over the nose of the hammer in the forward movement of the breech-piece. This tongue, however, is the invention of another, and I make no claim thereto.

The longitudinally-movable extractor which I have shown and described possesses an advantage over an extractor made fast to the breech-piece without such longitudinal movement, first, that in its extreme forward position it prevents the head of the incoming cartridge from passing so far back as to come into the recesses *u*, which it might do in some cases if the head of the cartridge happened to be somewhat smaller than the standard size, and the extractor-hook is close to the rear end of the breech-piece, as it must be if it be hung to the breech-piece, so as to prevent longitudinal movement—that is to say, when in its forward position, as seen in Fig. 6—it prevents such

possible entrance of the flange of the cartridge into the recesses *u*.

The stud 23 on the under side of the check, which works through the groove 25 on the upper side of the breech-piece and across the extractor as the breech-piece approaches its extreme rear position, will cause the extractor to move forward on the breech-piece until the lug 11 comes to a bearing against the shoulder 12, so that if the breech-piece is opened when there be no cartridge-shell in the magazine to extract the forward movement of the breech-piece is insured before a cartridge can fall from the magazine or be otherwise introduced into the auxiliary chamber, and as seen in Fig. 6, and will there stand as a guard to prevent the movement of the cartridge in the auxiliary chamber rearward to bring its head within the recesses *u*. The check serves also to draw the extractor rearward into the position seen in broken lines, Fig. 6, on the first part of the forward movement of the breech-piece. In such movement the groove 25 through the stud 23 draws the check inward, and as the stud passes into the groove in the extractor it will hold the extractor while the breech-piece moves forward, and until the extractor comes to its rear bearing, as indicated in broken lines, Fig. 6. This insures the freedom of the extractor to ride over the cartridge-head in the early part of the forward movement of the breech-piece and cartridge.

I have described the tongue 19 as a spring-tongue; but it will be understood that if the metal from which the magazine is made is inelastic the tongue will be simply bent in over the mouth of the magazine so as to prevent the escape of the cartridges from the magazine, and then when the magazine is set upon the receiver the tongue will be bent outward, as shown.

I claim—

1. In a fire-arm, the combination of the longitudinally-reciprocating breech-piece C, the firing-pin L, extending longitudinally through said breech-piece, the lever N, hung in said breech-piece and in connection with said firing-pin, constructed with the shoulder *m*, and the hammer P, constructed with a forward extension, T, against which the said shoulder *m* of the firing-pin lever will strike as the breech-piece approaches its extreme rear movement, substantially as described.

2. In a fire-arm, the combination of the longitudinally-reciprocating breech-piece C, the dog D, hinged in the breech-piece and extending rearward, constructed with an arm, F, extending downward, a longitudinally-reciprocating bar, G, in connection with said arm F, and extending forward through the receiver, provided with a handle, I, the shoulder E, against which the dog will abut when the breech-piece is in its closed position, and the shoulder *l* in the receiver in rear of the shoulder E, and against which the dog will abut as the breech-piece arrives at its extreme rear movement, substantially as described.

3. In a fire-arm, the combination of the longitudinally-reciprocating breech-piece C, the firing-pin L, extending longitudinally through said breech-piece, the dog D, hinged to the breech-piece and extending rearward, and constructed with the downwardly-projecting arm F, the longitudinally-reciprocating bar G in connection with said arm F, and extending forward through the receiver, provided with a handle, I, the bell-crank lever O N, hung in the breech-piece, the one arm, N, in connection with the firing-pin, the other arm, O, over the said dog and in the path of its movement, and also constructed with the shoulder *m*, and the hammer P, constructed with a forward extension, T, against which the said shoulder *m* of the firing-pin lever will strike as the breech-piece approaches its extreme rear movement, substantially as and for the purpose described.

4. In a fire-arm, the combination of the longitudinally-reciprocating breech-piece C, provided with an extractor-hook extending forward of its front face, and the receiver constructed with a mouth at the rear end of the barrel narrower than the diameter of the head of the cartridge, but greater in width than the diameter of the body of the cartridge, the sides of the receiver below said mouth constructed with longitudinal recesses *r*, forming the auxiliary chamber to receive the cartridge, the sides of the mouth at the rear end constructed with recesses *n*, through which the head of the cartridge may freely pass while the body passes downward through the mouth into the auxiliary chamber, the said auxiliary chamber constructed with recesses *u* from the lower side downward and in rear of the recesses *n* above, the receiver also constructed with an opening, V, from the auxiliary chamber downward, and into which said recesses *u* open, the said opening V being less in length than the mouth of the chamber, and so as to form a solid bottom, *s*, at the forward end of the auxiliary chamber, substantially as described.

5. In a fire-arm, the combination of the receiver constructed with the receiving-chamber for the cartridge in rear of the barrel, the said chamber constructed with recesses *u* at its rear end into an opening, V, downward through the receiver, the said opening less in length than the mouth of the chamber, and so as to leave a solid bottom, *s*, at the forward end, the longitudinally-reciprocating breech-piece in line with the barrel, the extractor W, arranged in the upper surface of the breech-piece, and free for a limited longitudinal movement, the said extractor constructed with a lug, 11, extending downward into a recess in the breech-piece and in rear of the inclined shoulder 12 in the breech-piece, and the check 21, hung above the breech-piece to swing in a horizontal plane, and provided with a stud, 23, extending downward toward the breech-piece, the extractor and breech-piece constructed with a diagonal groove, 25, near their forward end, substantially as described.

6. In a fire-arm, the combination of a longitudinally-reciprocating breech-piece, a receiver constructed with an auxiliary chamber to receive a cartridge between the open breech-piece and the rear end of the barrel, a mouth opening upward from said chamber, and an opening downward therefrom, and a magazine adapted to contain a series of cartridges, constructed with a flange at its front and rear end, the receiver with corresponding horizontal grooves with which said flanges may engage and locate the mouth of said magazine over the mouth of the receiver, the said magazine constructed with a tongue, 19, projecting inward across the mouth of the magazine, the receiver constructed with a lug, 20, corresponding to said tongue, and whereby in setting the magazine in place over the mouth of the receiver the said tongue will be turned outward to open the mouth of the magazine for the escape of the cartridges therefrom into the receiver, substantially as described.

7. In a fire-arm, the combination of a longitudinally-reciprocating breech-piece, a receiver constructed with an auxiliary chamber to receive a cartridge between the open breech-piece and the rear end of the barrel, a mouth opening upward from said chamber and an opening downward therefrom, a magazine adapted to contain a series of cartridges, constructed with a flange at its front and rear end, the receiver with corresponding horizontal grooves, with which said flanges may engage and locate the mouth of said magazine over the mouth of the receiver, and the turn-button 27, hung at one side of the mouth of the receiver and in the path of the moving breech-piece, adapted to be turned up into the mouth of the magazine as the breech-piece is moved forward or drop therefrom as the breech-piece is moved rearward, substantially as described.

8. In a fire-arm, the combination of the longitudinally-reciprocating breech-piece C, the receiver constructed with a mouth upon its upper side in rear of the barrel, and so as to form an auxiliary chamber into which the cartridge may be received for introduction into the barrel, a magazine arranged for at-

tachment to the upper side of the receiver and over the mouth, whereby the several cartridges in the magazine may successively fall into the auxiliary chamber in the receiver forward of the front face of the breech-piece, and a check arranged to swing transversely across the mouth of the receiver above the breech-piece, the said breech-piece and check constructed the one with a cam and the other with a corresponding shoulder substantially as described, and whereby said check will be automatically moved out of the mouth of the receiver as the breech-piece approaches its extreme rear movement, and return as the breech-piece is moved forward.

9. In a fire-arm, the combination of the longitudinally-reciprocating breech-piece C, the receiver constructed with a mouth, U, upon its upper side and in rear of the barrel, and so as to form an auxiliary chamber into which the cartridge may be received for introduction to the barrel, a magazine arranged for attachment to the upper side of the receiver and over the mouth, whereby the several cartridges in the magazine may successively fall into the auxiliary chamber in the receiver forward of the front face of the breech-piece, and the check 21, pivoted at the rear, extending forward into the mouth of the receiver, and so as to swing horizontally into and away from the mouth of the receiver over the cartridge standing in front of the breech-piece, the breech-piece provided with a longitudinal rib, 24, and constructed with a diagonal groove, 25, the check with a corresponding stud, 23, substantially as described, and whereby in the last part of the rear movement of the breech-piece the check will be thrown out of the mouth of the receiver, and in the first part of the forward movement of the breech-piece will be thrown into the mouth of the receiver and over the cartridge lying in the auxiliary chamber of the receiver, substantially as described.

WILLIAM B. FRANKLIN.

Witnesses:

CHAS. E. GROSS,

WM. WALDO HYDE.