No. 685.216.

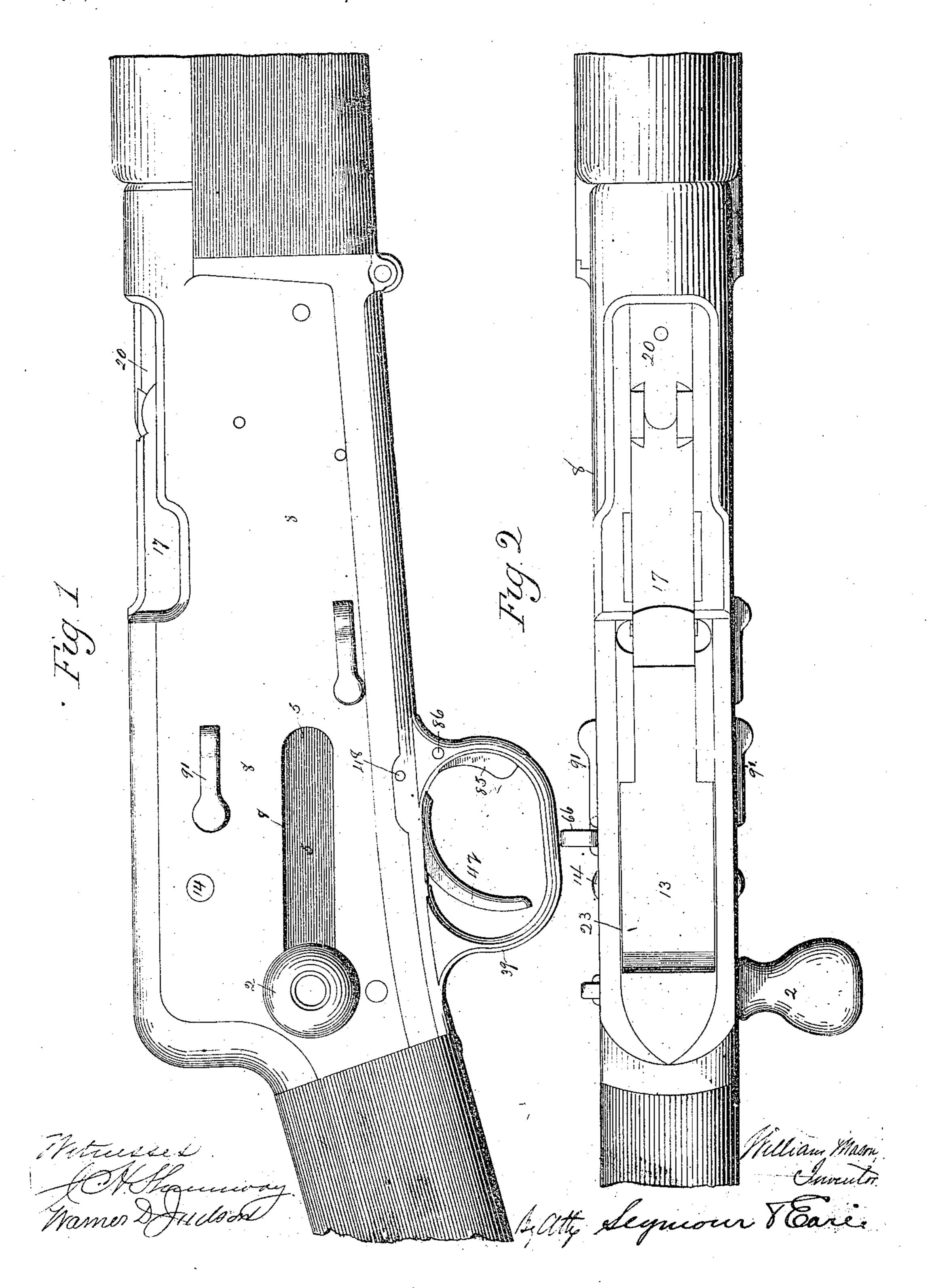
Patented Oct. 22, 1901.

#### W. MASON. MAGAZINE GUN.

(Application filed Aug. 20, 1900.)

(No Model.)

8 Sheets—Sheet I.



No. 685.216.

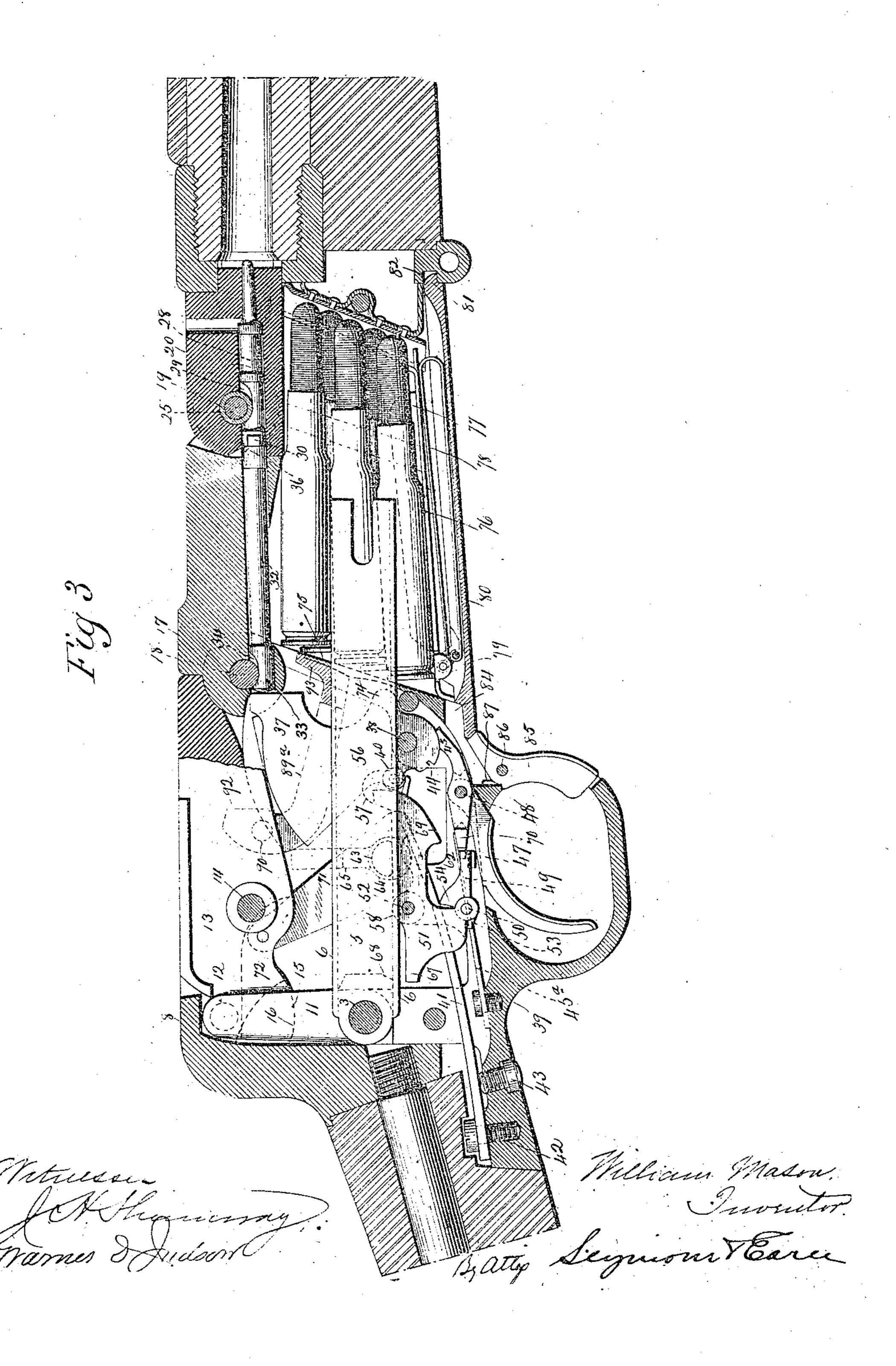
Patented Oct. 22, 1901.

### W. MASON. MAGAZINE GUN.

(Application filed Aug. 20, 1900.)

(No Model.)

8 Sheets—Sheet 2.



No. 685,216.

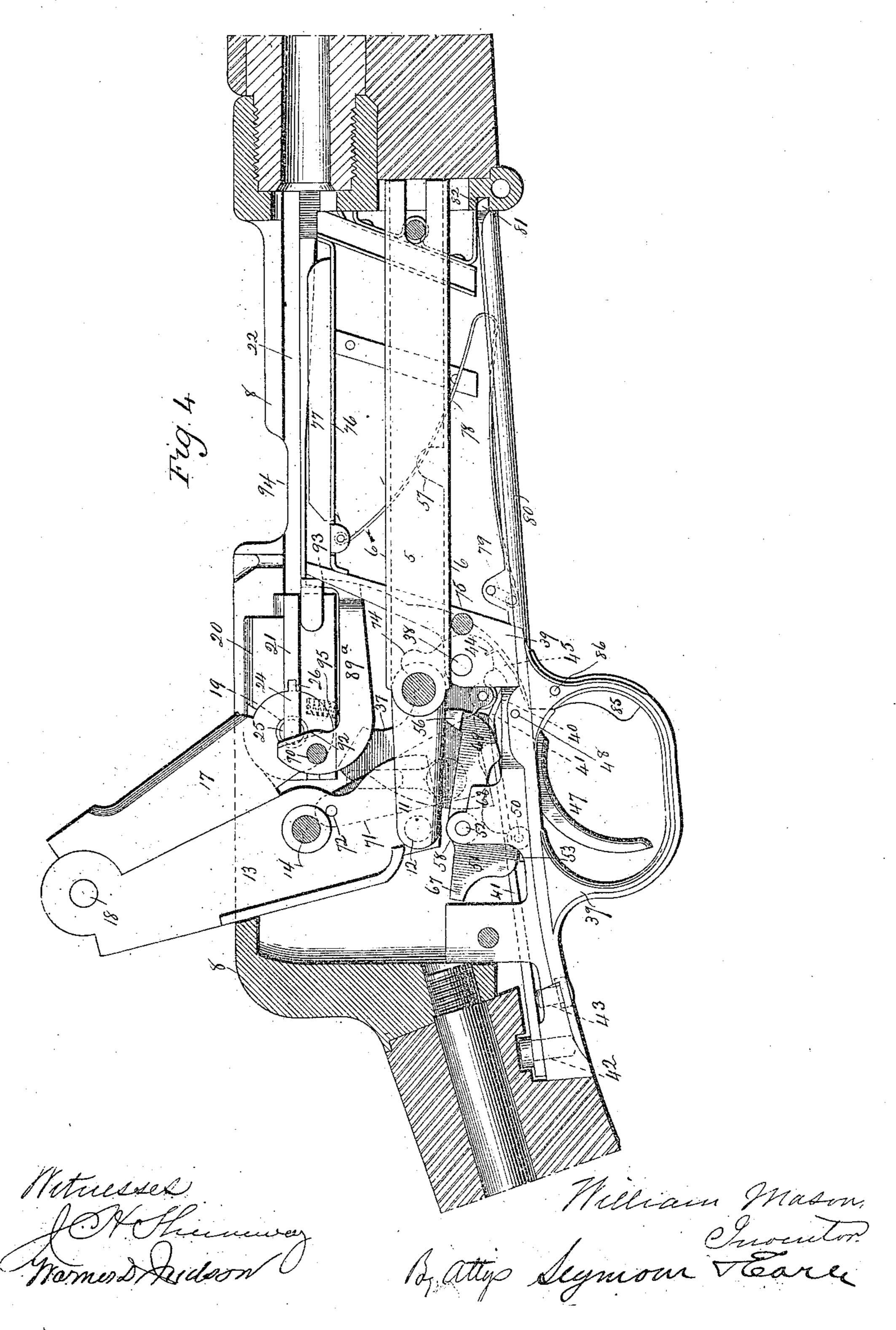
Patented Oct. 22, 1901.

#### W. MASON. MAGAZINE GUN.

(Application filed Aug. 20, 1900.)

(No Model.)

8 Sheets-Sheet 3.



No. 685,216

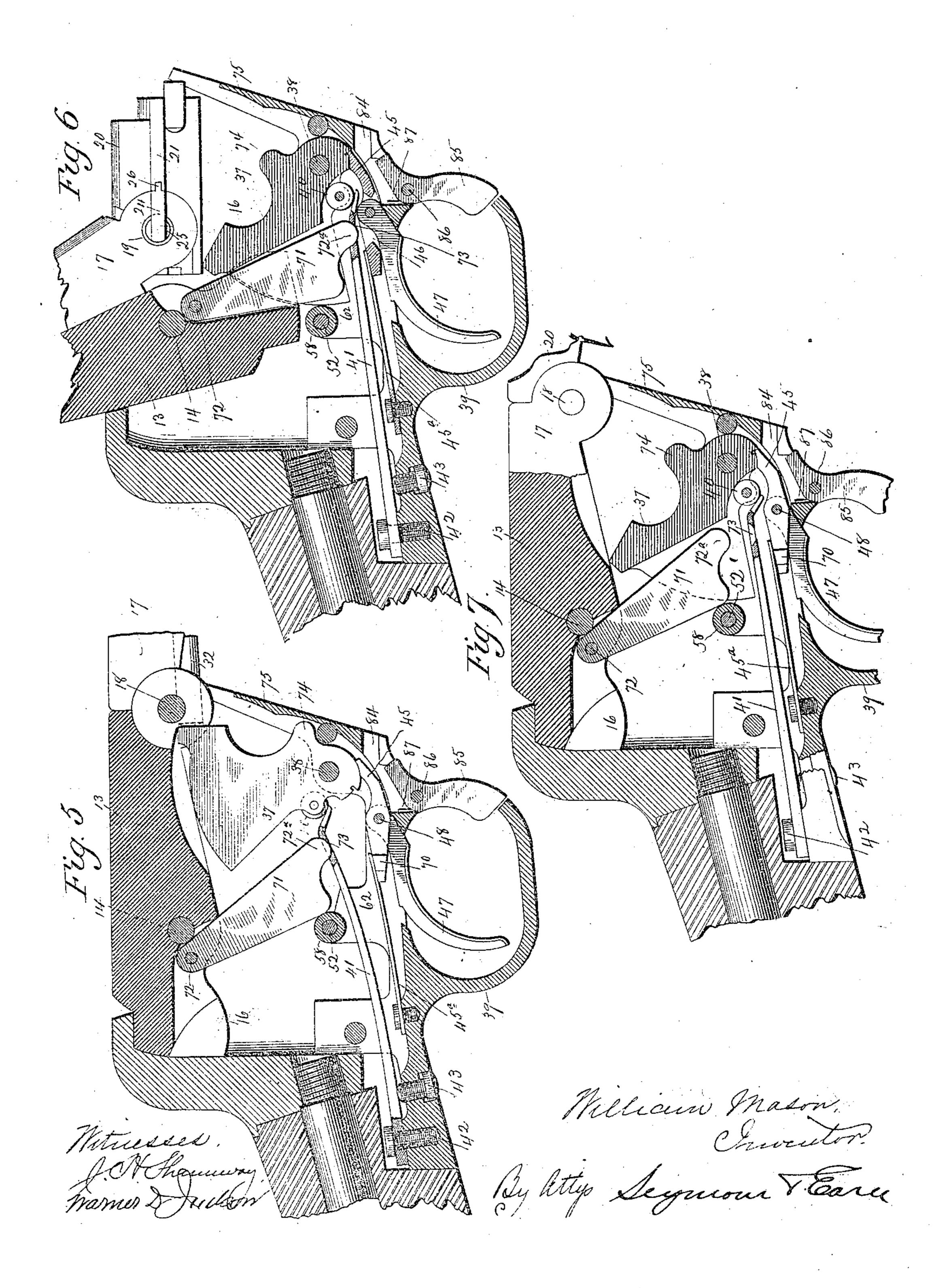
Patented Oct. 22, 1901.

#### W. MASON. MAGAZINE GUN.

(Application filed Aug. 20, 1900.

(No Model.)

8 Sheets—Sheet 4.



No. 685,216.

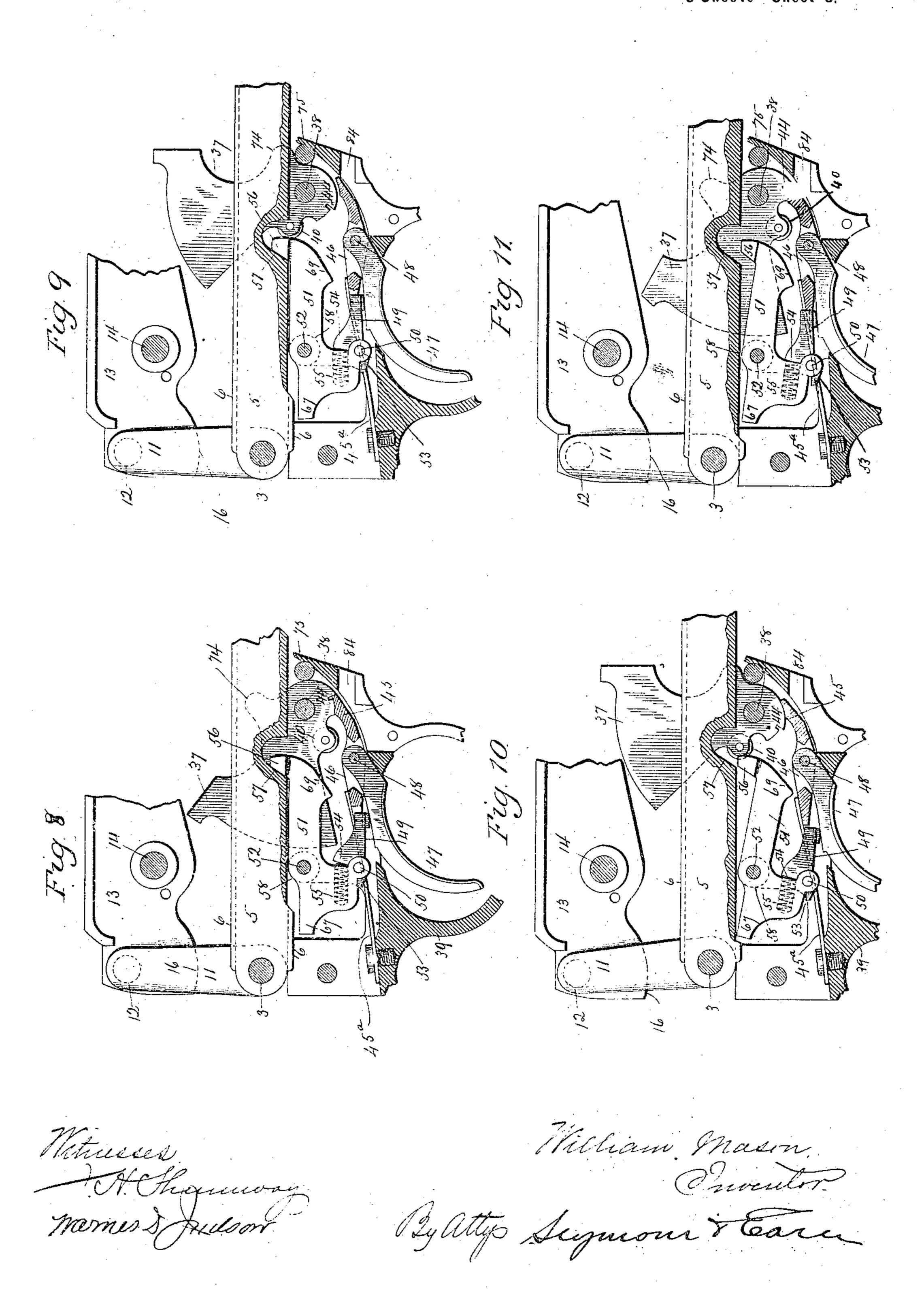
Patented Oct. 22, 1901.

# W. MASON. MAGAZINE GUN.

(Application filed Aug. 20, 1900.)

(No Model.)

8 Sheets—Sheet 5.

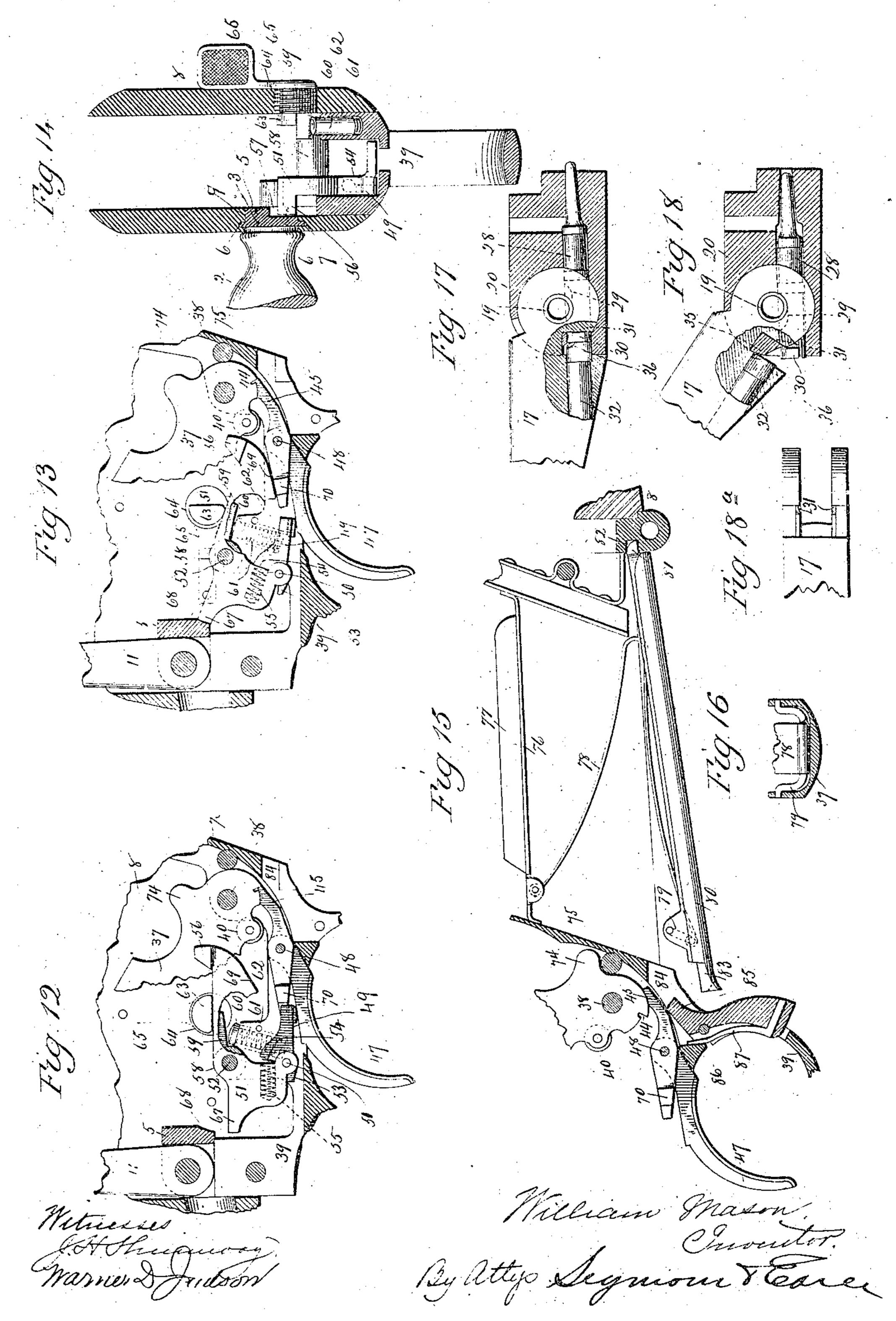


#### W. MASON. MAGAZINE GUN.

(Application filed Aug. 20, 1900.)

(No Model.)

8 Sheets—Sheet 6.



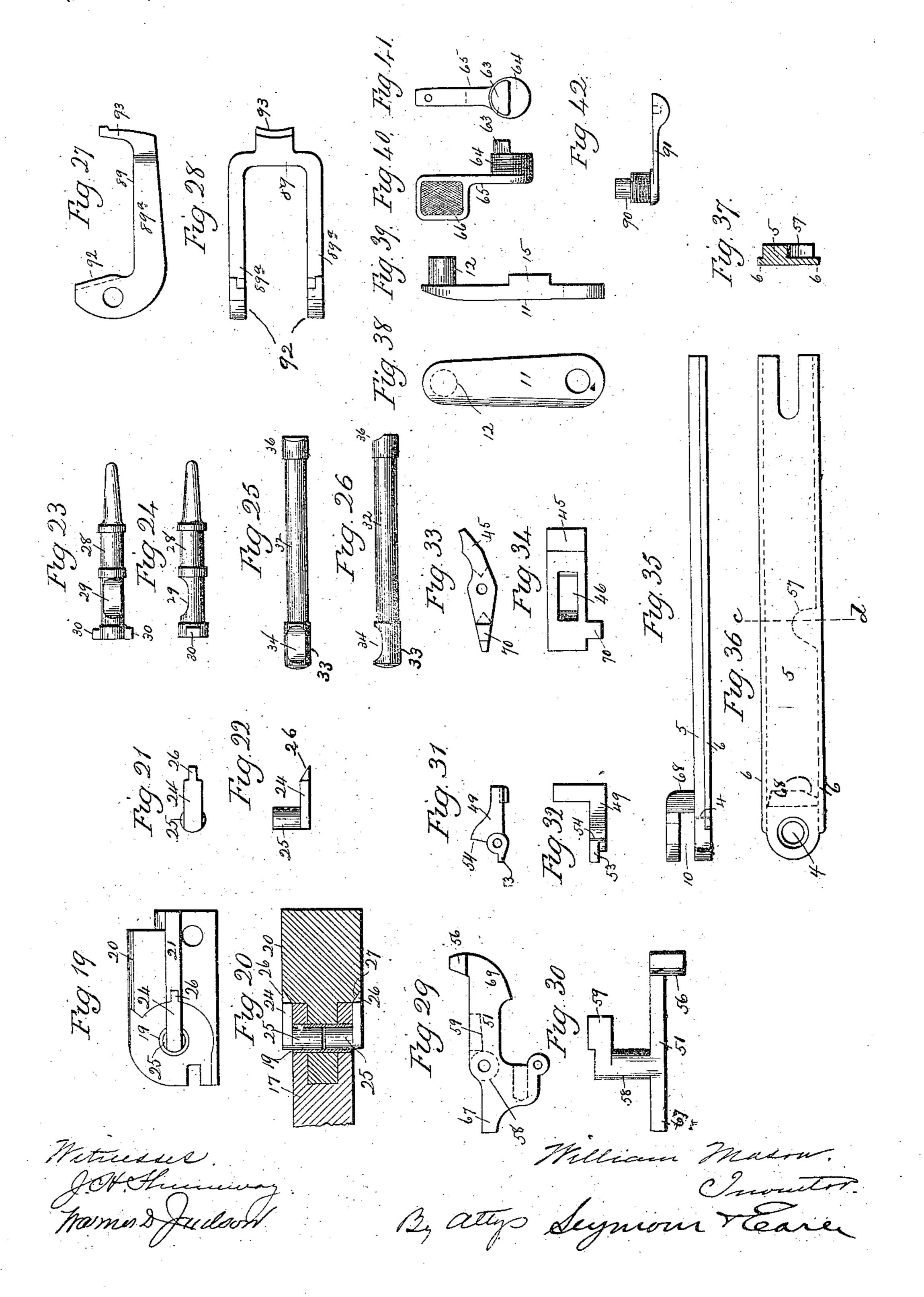
#### W. MASON.

# MAGAZINE GUN.

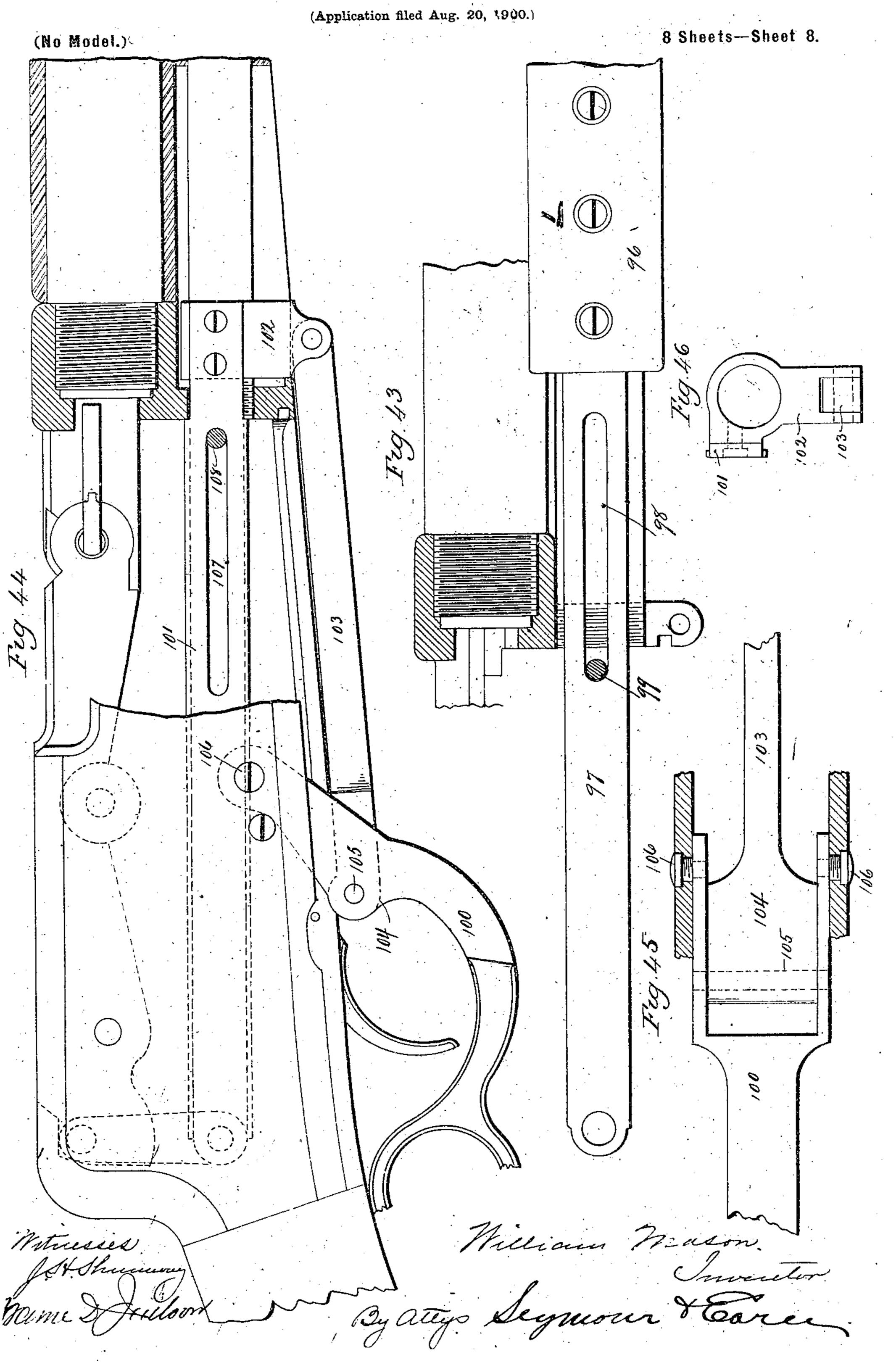
(Application filed Aug. 20, 1900.)

(No Model.)

8 Sheets—Sheet 7.



W. MASON.
MAGAZINE GUN.



# UNITED STATES PATENT OFFICE.

WILLIAM MASON, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE WINCHESTER REPEATING ARMS CO., OF NEW HAVEN, CONNECTICUT, A CORPORATION.

## WAGAZINE-GUN.

SPECIFICATION forming part of Letters Patent No. 685,216, dated October 22, 1901.

Application filed August 20, 1900. Serial No. 27,370. (No model.)

To all whom it may concern:

Beitknown that I, WILLIAM MASON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Magazine-Guns; and I do hereby declare the following, when taken in connection with the 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 broken view, in elevation, of the right-hand side of a gun constructed in accordance with my invention; Fig. 2, a broken plan view of the gun; Fig. 3, a view of the gun with the right-hand wall of the receiver removed and with the parts of the breech mechanism of the gun in their closed positions, some of the parts being represented in vertical section and others in elevation; Fig. 4, a corresponding view with the parts of the

gun in their open positions; Fig. 5, a broken view of the gun, partly in vertical section and partly in elevation, showing the gun closed and designed particularly to illustrate the operating position of the mainspring-depressing pawl; Fig. 6, a corresponding view showing the gun open with the links elevated, the mainspring depressed by the mainspring-de-

30 pressing pawl, and the hammer thrown back into its cocked position; Fig. 7, a corresponding view showing the gun closed, the hammer cocked, and the mainspring-depressing pawl lifted above the mainspring; Fig. 8, a detail

35 View, partly in elevation and partly in section, designed particularly to show the positions of the action-slide, the safety-lever, and the sear-fly at the time of firing the gun; Fig. 9, a corresponding view showing the positions of the parts after the trigger has been pulled.

9, a corresponding view showing the positions of the parts after the trigger has been pulled to operate the sear in releasing the hammer, which has been thrown forward into its fired position; Fig. 10, a corresponding view showing the position of the action-slide after it has been started forward sufficiently to accurate

been started forward sufficiently to operate the safety-lever in withdrawing the sear-fly from its blocking position between the trigger and the sear; Fig. 11, a corresponding view showing that the sear-fly cannot assume its

50 operating position between the sear and trigger/unless the trigger is allowed to move for-

ward after each firing of the gun, whereby the gun cannot be fired more than once for each pulling of the trigger; Fig. 12, a detail view, partly in elevation and partly in sec- 55 tion, designed particularly to show the safetylock, which is here represented in its retired or normal position; Fig. 13, a corresponding view showing the safety-lock in its locked position, in which it holds the safety-lever in 6c position to block the forward movement of the action-slide; Fig. 14, a detail view of the gun, in vertical transverse section, with particular reference to showing the safety-lock. and the safety-lever with which it coacts; Fig. 65 15, a detail view, in side elevation, particularly designed to show the magazine-cover, the locking-dog therefor, and the stirrup connection between the lower end of the magazine-spring and the cover; Fig. 16, a detail 70 view, in transverse section, showing the connection between the stirrup and the magazine-spring; Fig. 17, a detail view, in vertical longitudinal section, showing the firingpin and the firing-pin striker, respectively, 75 mounted in the breech-bolt and the forward. link; Fig. 18, a corresponding view showing the construction for the retraction of the firing-pin and the pushing back of the firingpin striker; Fig. 18a, a reverse plan view of 80 the forward end of the forward link; Fig. 19; a detached view, in side elevation, of the breech-bolt; Fig. 20, a detached broken view, in horizontal section, of the breech-bolt and the forward end of the forward link; Fig. 21, 85 a detached view, in side elevation, of one of the rib extensions of the breech-bolt; Fig. 22, a plan view thereof; Fig. 23, a detached plan view of the firing-pin; Fig. 24, a view thereof in side elevation; Fig. 25, a detached 90 plan view of the striker; Fig. 26, a view thereof in side elevation; Fig. 27, a detached view, in side elevation, of the ejector; Fig. 28, a plan view thereof; Fig. 29, a detached view, in side elevation, of the safety-lever; Fig. 30, a plan 95 view thereof; Fig. 31, a detached view, in elevation, of the sear-fly; Fig. 32, a plan view thereof; Fig. 33, a detached view, in side elevation, of the sear; Fig. 34, a plan view there. of; Fig. 35, a detached plan view of the ac- noo tion-slide; Fig. 36, a view thereof in side elevation; Fig. 37, a view of the action-slide in

transverse section on the line c d of Fig. 36; I Fig. 38, a detached view, in side elevation, of the action-slide link; Fig. 39, an edge view thereof; Fig. 40, a detached view, in side ele-5 vation, of the safety-lock; Fig. 41, a face view thereof; Fig. 42, a plan view of the short ejector-screw pivot, showing its forwardly-extending wing; Fig. 43; a broken view, in side elevation, showing the use of a sliding foreso arm in place of a knob-like handle for actuating the action-slide; Fig. 44, a broken view showing the use of a swinging hand-lever for actuating the action-slide; Fig. 45, a detail plan view showing the swinging hand-lever as and the link connecting the same with the action-slide; Fig. 46, a detail view of the coupler employed to connect the action-slide with the link connected with the hand-lever.

My invention relates to an improvement in magazine-guns, the object being to produce an easily-operated, convenient, and effective gun of the type in which the breech-bolt is operated by two toggle-links which hold it in

its closed position.

With these ends in view my invention consists in a gun having certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In carrying out my invention I employ, as herein shown, a knob-like handle 2, formed with a threaded stem 3, adapting it to be screwed into the threaded opening 4, Fig. 35, formed for its reception in the rear end of an 35 action-slide 5, formed upon its upper and lower edges with ribs 6, which guide it back and forth in a long slot 7, formed for its reception in the inner face of the right-hand wall of the gun-frame or receiver 8, which is 40 formed with a slot 9, representing the distance traveled by the handle forward and back, and in which the handle is confined to pure reciprocating movement. This handle might, however, be replaced by some other 45 form of actuator connected with the slide, such as what is known as a "sliding-action fore-arm" or a "swinging handle-lever." The said action-slide is formed at its rear end with a fork 10, receiving the lower end of an actiongo slide link 11; Fig. 38, formed at its upper end with an inwardly-extending hub-like pivot 12, Fig. 39, by means of which it is pivotally connected with the rear end of the rear link 13, Figs. 3, 8, 9, 10, and 11, which is hung 55 upon a heavy pivot 14, the ends of which have bearing in the opposite walls of the receiver or gun-frame 8. Upon its inner face the link 11 is formed with a bearing-lug 15, Fig. 39, having its upper edge concaved for coaction 66 with the rounded lower edge 16 of the rear end of the rear link 13, whereby strain is taken from the hub-like pivot 12 in closing

the gun. For this purpose the hole formed

in the rear end of the rear link 13 to receive

11 is made enough larger in diameter than

the said pivot to permit the rounded edge 16

65 the hub-like pivot 12 of the action-slide link

from the pivot 12, as stated, by he lifting of 70 the concaved surface of the lug 15 against the rounded edge 16 of the rear end of the rear link. The forward link 17 is connected by a pivot 18 with the forward end of the rear link 13, while the forward end of the 75 forward link is connected by means of a hollow bushing, like pivot 19, with the breechbolt 20, which is provided upon its opposite sides with guiding-ribs 21, running in grooves 22, Fig. 4, formed for their reception in the 80 inner faces of the side walls of the receiver 8. The breech-bolt is thus confined to reciprocation back and forth in a straight line. The recoil following the explosion of a cartridge in the gun-barrel is taken by the for- 85 ward and rear links when they are closed down and in line, the rear link being at this time supported at its rear end by the actionslide link 11, which at this time stands vertically under the rear end of the rear link, 90 the rounded edge of which rests upon the bearing-lug of the link 11. For the introduction of the breech-bolt into the gun-frame 8 the same is formed at its rear end with an opening 23, Fig. 2, which is located to the 95 rear of the grooves 22 before mentioned and which permits the breech-bolt to be let down into the gun-frame and then moved forward into position. In order to increase the length of the ribs 21 and so increase the bearing of the 100 breech-bolt, I provide the same with rib extensions 24, located upon and extending forward from short studs 25, which are inserted into the opposite ends of the bushing-like pivot 19 aforesaid, Figs. 20, 21, and 22, the 105 forward ends of the rib extensions 24 being formed with beveled fingers 26, which enter slots 27, formed in the rear ends of the ribs 21, as shown in Figs. 19 and 20, whereby the extensions 24 are held in place in line with 110 the said ribs 21, of which they form rearward extensions. In this way the guiding-surfaces of the breech-bolt are increased nearly half without lengthening the gun-frame, which is undesirable. The bushing-like pivot 19 is 115 made hollow for no other purpose than to receive the studs 25, carrying the rib extensions 24, which when the gun is assembled are always in line with the guiding-ribs 21,which are formed with slots 27 for the recep- 120 tion of the beveled fingers 26, located at the ends of the said rib extensions 24 for the purpose of holding the said rib extensions in line with the said guiding-ribs of the bolt before the same is introduced into the frame of 125 the gun.

of the said link 13 to rest upon the lug 15 of

the said link 11, so that the strain is taken

In the breech-bolt I locate a firing-pin 28, formed with the usual stop-notch 29, the ends of which coact with the bushing-like pivot-pin 19 to limit the longitudinal movement of 130 the pin, which is formed at its extreme end with two horizontally-arranged retracting-lugs 30, which are engaged by retracting-shoulders 31, Figs. 17, 18, and 18°, formed at

the forward end of the forward link, which as it is lifted in the opening of the gun effects the retraction of the firing-pin through the medium of the said shoulders, as best

5 shown in Fig. 18.

A firing-pin striker 32, Figs. 3, 25, and 26, is mounted for longitudinal movement in the forward link 17 and provided at its rear end with a head 33, containing a shallow notch | 10 34, the end walls of which engage, Fig. 3, with the pivot 18, uniting the rear and forward links, whereby the movement of the striker is limited. The said striker is pushed back to correspond with the retraction of the 15 firing-pin and during the elevation of the links by means of a cam-surface 35, Fig. 18, located upon the rear end of the bolt and working upon a cam-surface 36, formed at the upper corner of the forward end of the said 20 striker, Figs. 25 and 26. The said striker and firing-pin constitute, in effect, a sectional

firing-pin. A hammer 37, Fig. 5, is employed for giving the striker, and hence the firing-pin, its 25 forward impulse. This hammer is pivoted upon a pin 38, mounted in the trigger guardplate 39. It is provided with an antifrictionroller 40, engaged by the forward end of a main or hammer spring 41, secured at its rear. 30 end by a screw 42 to the rear end of the plate 39 and provided with the usual strain-screw 43 for varying the tension of the spring. The said hammer is furnished in its heel with a cocking-notch 44, receiving the forward end 35 of a sear 45, controlled by a sear-spring 45a, Figs. 33 and 34, and having a central opening 46, receiving the upper end of the trigger 47, which is hung upon a pin 48, mounted in the trigger guard-plate 39, and also constituting

the pin upon which the sear 45 swings. The rear end of the sear 45 extends over the forward end of a sear-fly 49, Figs. 31 and 32, hung upon a pin 50 in the lower end of a safety-lever 51, Figs. 29 and 30, which is 45 itself hung upon a pin 52, Fig. 3, mounted in the guard-plate 39. The said safety-lever constitutes a pivotal carrier for the sear-fly, which is moved back and forth as the lever is turned on its pivot. The said sear-fly 49

50 is formed with a stop-finger 53 and a shoulder 54, which latter is engaged by a spiral spring 55, Figs. 8, 9, 10, and 11, located in the safety-lever and exerting a constant effort to press the forward end of the sear-fly down-55 ward upon the upper edge of the trigger 47. The said safety-lever 51 is formed at its for-

ward end with a beveled lug 56, entering a notch 57, formed in the lower edge of the action-slide 5, and having a beveled rear 60 wall. The said lever 51 is also formed with a hub 58, through which the pin 52 passes

and which is provided at its opposite or lefthand end with a short arm 59, Fig. 30, the - under face of which is engaged by a hollow 65 plunger 60, containing a spring 61, and lo-

cated in a plunger-chamber 62, formed in the

a constant effort to lift the beveled lug 56 of the safety-lever into the notch 57 of the action-slide 5. The upper face of the arm 70 59 is located in position for coaction with a cam-pin 63, projecting inwardly from the threaded hub 64 of a safety-lock 65, formed with a wing-like finger-piece 66, as seen in Fig. 40. This safety-lock is located upon the 75 left-hand wall of the gun-frame and turns upon its hub 64, which is entered into a suitable threaded opening formed in the said wall. Normally the lock is located in a vertical position, in which it is held in any ap- 80 proved manner. When the lock is turned down into the horizontal position shown by Fig. 13 of the drawings, the cam-pin 63, acting upon the arm 59 of the safety-lever, rocks the same upon the pivot 52, whereby the for- 85. ward end of the lever is depressed and the rear end of the lever elevated to bring its stop-finger 67 into engagement with a stopshoulder or abutment 68, formed very near the rear end of the action-slide 5, as shown 90 in Fig. 13. When the forward end of the safety-lever 51 is depressed, as described, its lower edge is engaged at about the point 69 with a laterally-projecting lug 70, Figs. 13 and 34, formed upon the sear, which is thus 95 so firmly held that its forward end cannot be jarred out of the cocking-notch 44 of the hammer. It will thus be seen that when the safetylock is in use the action-bar is blocked against forward movement by the stop-finger of the 100 safety-lever and that the sear is held against rocking movement by the forward end of the said lever, thus locking the gun against the possibility of accidental firing. When in the ordinary operation of the gun by the handle 105 2 the same is gripped and pushed forward, the beveled rear wall of the notch 57 in the action-slide 5 engages with the beveled lug 56 of the safety-lever and rides over it, turning the lever on its pivot 52 and drawing the 110 sear-fly 49 rearwardly away from the position in which its forward end forms a connection between the rear end of the sear and the upper edge of the trigger. Unless the forward end of the sear-fly is interposed between the 115 upper edge of the trigger and the rear end of the sear the latter cannot be operated by the former, because the trigger cannot be lifted high enough to engage with the sear for operating it. On the other hand, when the han- 120 dle 2 is drawn rearward for closing the gun the action-slide does not permit the safetylever to swing upward at its forward end for the reinsertion of the forward end of the searfly between the sear and the trigger until the 125 action-slide has completed its rearward movement, when it brings its notch 57 into such a position as to receive the beveled lug 56, formed at the forward end of the lever, so that it is impossible to fire the gun until the 130 same has been fully closed.

For taking the power off, the main or hammer spring 41 of the hammer, so as to permit trigger guard-plate 39. This spring exerts I the gun to be opened easily, I employ a main-

spring-depressing pawl 71, hung by its upper end from a pin 72, mounted in the rear link 13 and located directly back of the pivot 14 thereof. This pawl rides over the hub 58 of 5 the safety-lever and is formed at its lower forward corner with a nose 72°, entering a depression 73, formed in the forward end of the spring. When the links are elevated in the opening of the gun, the pawl is pressed to downward, with the effect of depressing the mainspring 41 and taking its tension off the hammer 37, which is thus left free to be swung back by the bolt, to which it offers no substantial resistance. As the hammer is rocked as backward by the rearward movement of the bolt its cock-notch 44 is brought into engagement with the forward end of the sear, which snaps into it and holds the hammer cocked, the power of the mainspring 41 being re-20 stored to the hammer on the closing movement of the gun, during which the pawl 71 is lifted.

The hammer 37 is formed at its lower end with a nose 74, which strikes against the rear surface of the rear wall 75 of the magazine, so as to prevent the hammer from moving too far forward when the gun is being opened and before the rear end of the bolt engages with the hammer to begin to push it rearward.

The gun is provided with a carrier 76, located in its magazine 77 and operated by a flat spring 78, bent upon itself and having its upper end loosely connected with the rear end of the carrier and having its lower end con-35 nected with a stirrup 79, the ends of which are swiveled in the cover 80 of the magazine, as clearly shown in Fig. 16. This stirrup connection between the spring 78 and the cover provides play for the spring when it is being 40 compressed by the depression of the carrier 76. The forward end of the cover 80 is formed with a lug 81, which is inserted into a transverse notch 82, formed in the receiver 8, while the rear end of the cover is provided with a 45 locking-finger 83, adapted to enter a notch 84, formed in the receiver, the said finger being normally held in the said notch by means of the upper end of a locking-dog 85, mounted upon a pin 86 in the trigger guard-plate 39. 50 This dog is controlled by a spring 87 and projects sufficiently into the trigger-guard to be operated by moving the finger forward therein.

A yoke-shaped ejector 89, having arms 89° 89°, Figs. 27 and 28, is mounted in the receiver by means of two short screw-pivots 90, having wing-like forward projections 91, which lie against the outer faces of the side walls of the receiver, the said pivots passing through the upwardly-turned ends of the said arms. The upper ends of the said arms terminate in lugs 92, which are engaged by the rear ends of the extension-ribs 24, already described, at points above the pivots 90, whereby the ejector is suddealy turned on those pivots for the elevation of its forward end, which is furnished with a toe 93, which engages with

the body of the spent shell and projects it upward through the loading and ejection opening 94, formed in the top of the gun-frame. 7c Springs 95 are employed for restoring the ejec-

tor to its normal position.

Having described the construction of my improved gun in detail, I will now proceed to briefly set forth its mode of operation. In 75 order to open the gun, its handle 2 is grasped and pushed directly forward, with the result of moving the action-slide 5 correspondingly forward. The forward movement of the action-slide 5 causes the forward movement of 80 the lower end of the action-slide link 11, which draws down upon the rear end of the rear link 13, which is turned upon its pivot 14, whereby its forward end is lifted, with the effect of also retracting and lifting the forward link 17 and 85 drawing the breech-bolt rearward into its full open position, as shown in Fig. 4. The gun is now ready to be charged with cartridges through the loading and ejection opening 94. The cartridges may be loaded singly by hand 90 or from a clip. The magazine having been loaded, the gun is closed by grasping the handle 2 and drawing it rearward to the limit of its rearward movement, whereby the breechbolt is moved forward into its closed position, 95 in which it is held by the alinement of the rear and forward links. The gun is now ready to be fired. After firing it the spent shell is extracted and another shell loaded into the gun-barrel by the forward and back move- 100 ment of the handle. It seems unnecessary in this connection to describe the operation of all of the parts, inasmuch as their operation has been described in conjunction with the description of their detailed construction.

It is apparent that in carrying out my invention some changes from the construction herein shown and described may be made, and I would therefore have it understood that I do not limit myself to such details, but hold 110 myself at liberty to make such deviations therefrom as fairly fall within the spirit and scope of my invention. Thus in Fig. 43 I have shown the use of a sliding fore-arm 96 for operating the action-slide 97, to the forward 115' end of which it is attached, the said slide being formed with a slot 98, receiving a stop-pin 99, which limits the movement of the slide forward and back. In Figs. 44, 45, and 46 I have shown the use of a hand-lever 100 for operat- 120 ing the action-slide 101, which is extended at its forward end for the attachment of a coupler 102, having pivoted to it the forward end of a long link 103, the rear end of which is enlarged to form a head 104, attached by a pin 125 105 to the hand-lever 100, swinging on screwpivots 106 106. In this construction also the slide 101 is formed with a slot 107, receiving a stop-pin 108.

If desired, some other longitudinally-movable member of the action mechanism of the
gun might be utilized for the operation of the
safety-lever, constituting a pivotal carrier for

the sear-fly, than the action-slide.

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

1. In a magazine-gun, the combination with 5 & breech-bolt, of upwardly-opening rear and forward links connected therewith, an actionslide, a link connected with the action-slide and with the said rear link at a point to the rear of the pivot of the latter, and an actu-10 ator for the said slide.

2. In a magazine-gun, the combination with a breech-bolt, of upwardly-opening rear and forward links connected therewith, an actionslide, a vertically-arranged action-slide link 15. connected with the said slide, and connected with the rear link at a point to the rear of the pivot thereof, and an actuator for the said slide.

3. In a magazine-gun, the combination with 20 the receiver thereof, of a breech-bolt, upwardly-opening rear and forward links connected with the said bolt, a longitudinallymovable action-slide, a vertically-arranged action-slide link located in the rear end of the 25 said receiver, and connected with the rear

end of the action-slide, and with the rear link at a point to the rear of the pivot thereof, and an actuator for the said slide.

4. In a magazine-gun, the combination with 30 a breech-bolt, of upwardly-opening rear and forward links connected therewith, a longitudinally-movable action-slide, an actuator therefor, and an action-slide link connected with the action-slide, and with the rear link 35 at a point to the rear of the pivot thereof and provided with a bearing coacting with the rear end of the said link in supporting the same in its closed and locked position.

5. In a magazine-gun, the combination with 40 a breech-bolt, of upwardly-opening rear and forward links connected therewith, a longitudinally-movable action-slide, a verticallyarranged action-slide link connected with the action-slide, and with the rear link at a point to the rear of the pivot thereof, and formed with an inwardly-projecting bearing-lug which engages with the rear end of the rear link for supporting the same in its locked position, and an actuator connected with the 50 said slide.

6. In a magazine-gun, the combination with the breech-bolt thereof, of upwardly-opening rear and forward links connected with the said bolt, a longitudinally-movable action-55 slide, an action-slide link connected with the said slide and with the rear link at a point to the rear of the pivot thereof, and a laterallyprojecting handle connected with the rear

end of the action-slide.

7. In a magazine-gun, the combination with the breech-bolt thereof, of upwardly-opening rear and forward links connected therewith, a longitudinally-movable action-slide, a vertically-arranged action-slide link connected 65 with the rear end of the said slide and with the said rear link at a point to the rear of the pivot thereof, and a laterally-projecting han-

dle connected with the rear end of the actionslide concentric with the connection of the action-slide link therewith.

8. In a magazine-gun, the combination with a breech-bolt, of upwardly-opening rear and forward links connected therewith, means for operating the same, a firing-pin mounted in the breech-holt and coacting at its rear end 75 with the forward end of the forward link which retracts the pin when the links are opened upwardly, and a striker located in the forward link and coacting at its forward end with the rear end of the breech-bolt which 80 pushes the said striker back when it is lifted in the opening of the said rear and forward links.

9. In a magazine-gun, the combination with a breech-bolt, of rear and forward links con- 85 nected therewith, a firing-pin mounted in the breech-bolt and provided at its rear end with laterally-extending lugs which are engaged by the forward end of the forward link for the retraction of the firing-pin, and a striker 90 mounted in the forward link and adapted at its forward end to be engaged with a camsurface upon the rear end of the breech-bolt which pushes the striker rearward and holds it in its rearwardly-pushed position until the 95 gun is closed.

10. In a magazine-gun, the combination with a breech-bolt provided upon its sides with guiding-ribs, of upwardly-opening rear and forward links for operating the bolt, and 100 two independently-formed rib extensions applied to the bolt for rearwardly extending its

ribs and increasing their bearing.

11. In a magazine-gun, the combination with a breech-boit provided upon its sides 105 with guiding-ribs, of upwardly-opening rear and forward links for operating the same, a tubular bushing-like pivot connecting the forward end of the forward link with the rear end of the breech-bolt, and two independ- 110 ently-formed rib extensions provided at their rear ends with studs which enter the opposite ends of the said bushing, and extending forwardly from the said studs to meet the rear

ends of the said guiding-ribs of the bolt. 12. In a magazine-gun, the combination with the frame thereof, of a breech-bolt provided with guiding-ribs, upwardly-opening rear and forward links, a hollow bushing-like pivot connecting the forward end of the for- 120 ward link with the rear end of the bolt, independently-formed rib extensions located at the rear ends of the ribs of the bolt and connected therewith through the said bushinglike pivot, and an ejector hung in the gun- 125 frame and engaged by the rear ends of the said rib extensions for operating the ejector when the bolt is drawn rearward by the upwardly-opening action of the said rear and forward links.

13. In a magazine-gun, the combination with the hammer, sear and trigger thereof, of a pivotal sear-fly adapted to be interposed between the rear end of the sear and the trig-

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ger which is thus adapted to operate the sear, a pivotal sear-fly carrier for the sear, and a longitudinally-movable part coacting with the said sear-carrier, whereby the action of 5 the sear-fly is controlled and the same permitted to come into play when the gun is closed.

14. In a magazine-gun, the combination with the breech-bolt thereof, of a longitudio nally-movable action-slide connected with the bolt for operating the same, a hammer, a sear and a trigger, a pivotal sear-fly adapted to be interposed between the sear and the trigger, which is thus made to operate the sear, and 5 a pivotal sear-fly carrier, coacting with the slide for controlling the action of the sear-fly and permitting the same to be interposed between the sear and the trigger when the gun

is closed by the action of the slide.

15. In a magazine-gun, the combination with the hammer thereof, of a sear formed with a central opening, a trigger extending upward into the said opening, a pivot on which both the sear and trigger swing, a sear-25 fly adapted to be interposed between the rear end of the sear and the trigger so as to permit the latter to operate the former, a pivotal carrier for the sear-fly, and an action-slide coacting with the forward end of the pivotal 30 carrier to normally maintain the carrier in position to retire the sear-fly, and adapted, when the gun is closed, to permit the pivotal carrier to assume a position in which it enters the sear-fly between the trigger and the 35 sear.

16. In a magazine-gun, the combination with the hammer thereof, of a sear, a trigger, a sear-fly adapted to be interposed between the sear and the trigger to permit the former 4c to be operated by the latter, a safety-lever constituting a pivotal carrier for the sear-fly which is operated by it, and an action-slide coacting with the forward end of the said lever to normally maintain the sear-fly out of 45 action until the gun is closed when the slide allows the lever to swing to move the sear-

fly between the sear and trigger.

17. In a magazine-gun, the combination with an action-slide formed at its rear end 50 with a notch, of a safety-lever adapted at its forward end to engage with the lower edge of the slide until the gun is closed when the forward end of the lever enters the notch in the slide, a sear-fly pivotally connected to the

said lever, the pivotal movement of which 53 moves the fly forward and back, a sear, a trigger brought into operative relations with the sear by the interposition of the fly between them, and a hammer.

18. In a magazine-gun, the combination 60 with a longitudinally-movable action-slide, of a safety-lever pivotally mounted within the gun and adapted at its rear end to engage with the slide for blocking the forward movement of the same, and a safety-lock 65 mounted in the gun-frame and coacting with the said lever for lifting its rear end into position to engage with the slide and lock the

forward movement thereof.

19. In a magazine-gun, the combination 70 with a longitudinally-movable action-slide, of a safety-lever pivotally mounted within the gun and adapted at its forward end to engage with the slide which holds it in its normal position, a sear-fly pivoted to the said 75 safety-lever, a sear and a trigger brought into operative relations by the interposition of the sear-fly between them, a hammer engaged by the sear, and a safety-lock coacting directly with the safety-lever to hold the same in po- 80 sition to block the forward movement of the action-slide and also coacting directly with the sear to maintain the same engaged with the cocking-notch of the hammer.

20. In a magazine-gun, the combination 85 with the bolt thereof, of rear and forward links for operating the bolt, a hammer, a spring therefor, and a hammer-spring-depressing pawl pivotally mounted in the rear link and engaged with the said spring for depress- 90 3 ing the same and taking the power of the hammer-spring during the opening of the

gun.

21. In a magazine-gun, the combination with the magazine thereof, of a carrier located 95 in the magazine, a removable cover for the lower end of the magazine, a carrier-spring connected with the carrier, and a stirrup pivotally mounted in the rear end of the cover, and having the lower end of the carrier-spring 100 connected with it.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

WILLIAM MASON.

Witnesses: FREDERIC C. HARLE, THOS. C. JOHNSON.