



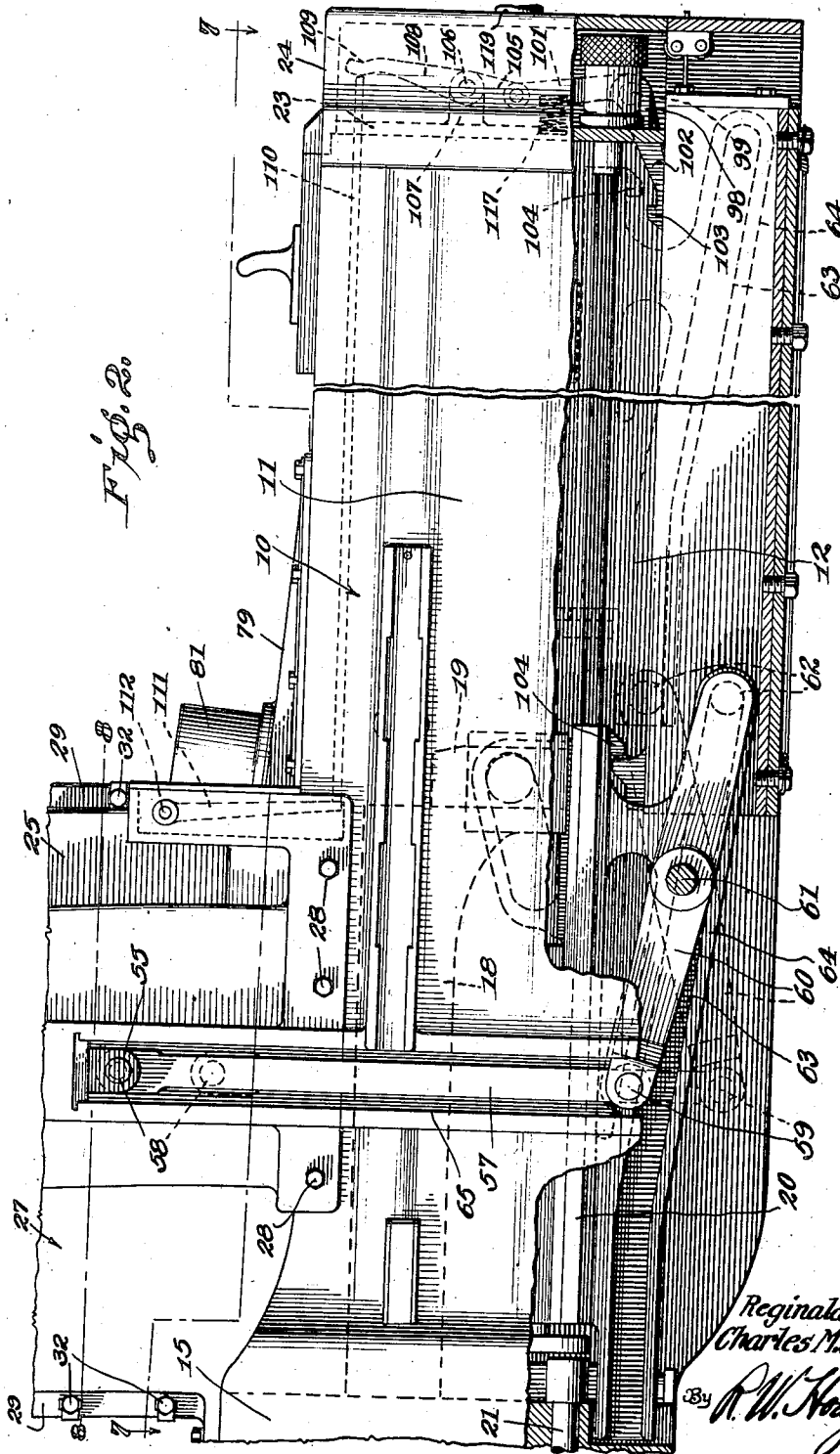
March 5, 1940.

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CARTRIDGE FEED FOR GUNS

2,192,677

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*Fig. 20*

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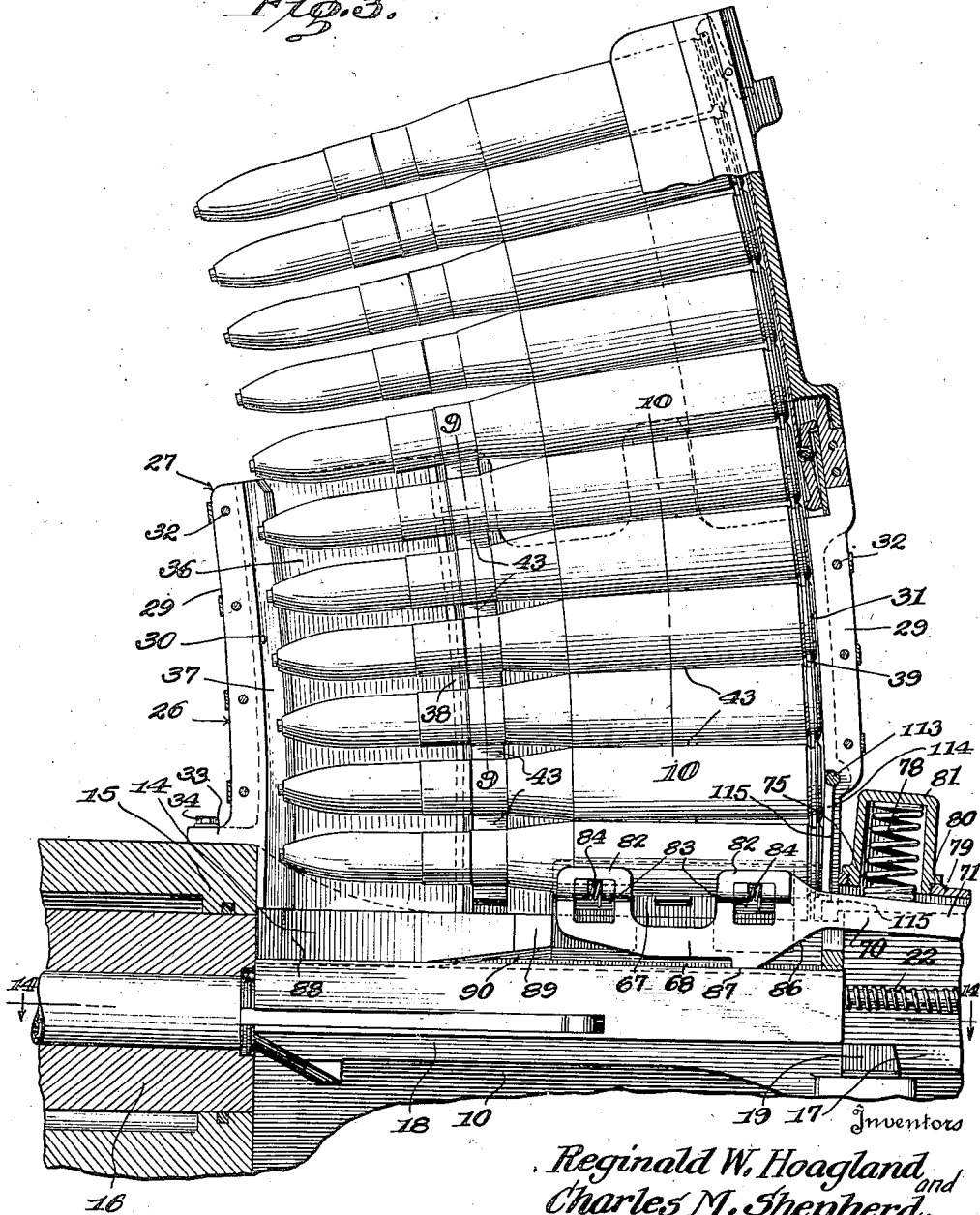
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CARTRIDGE FEED FOR GUNS

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Fig. 3.



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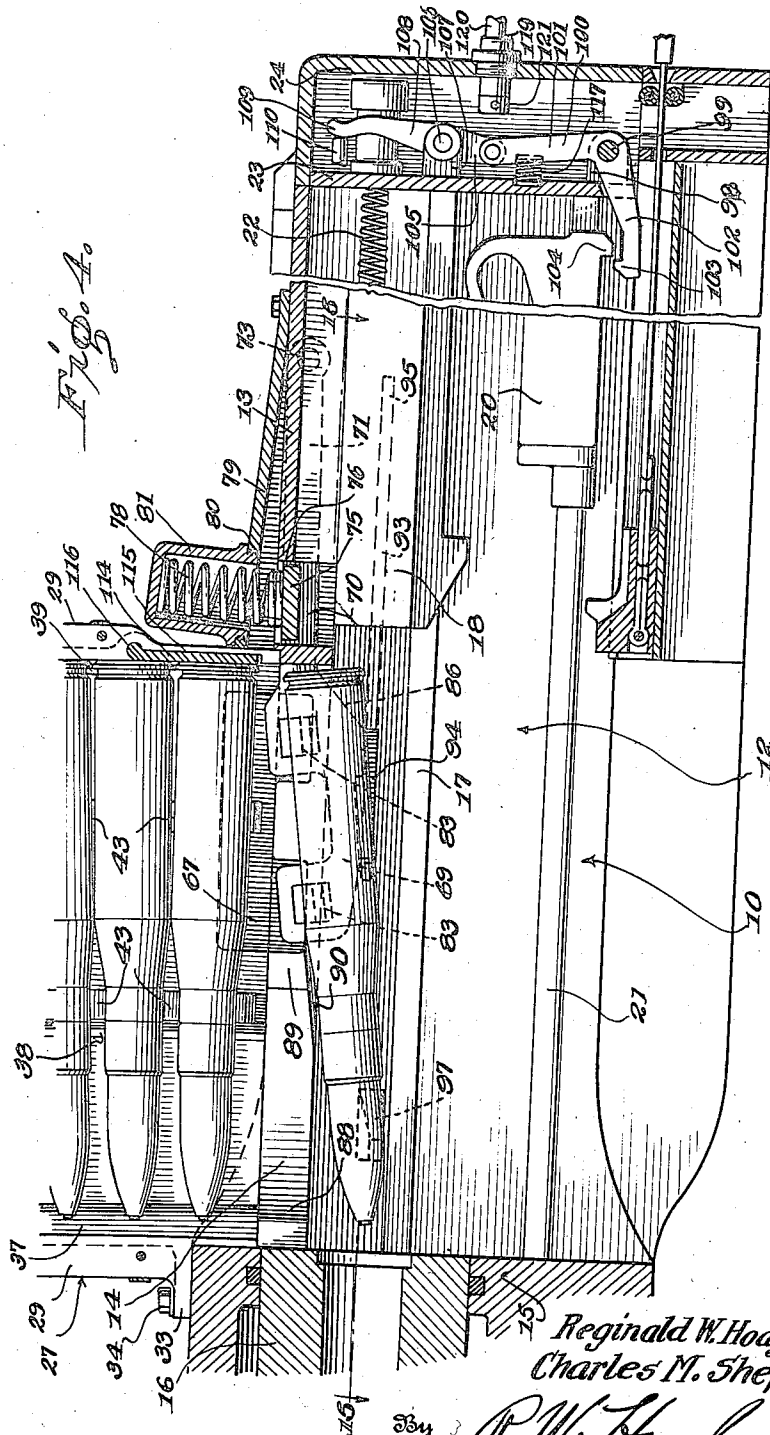


Fig. 1

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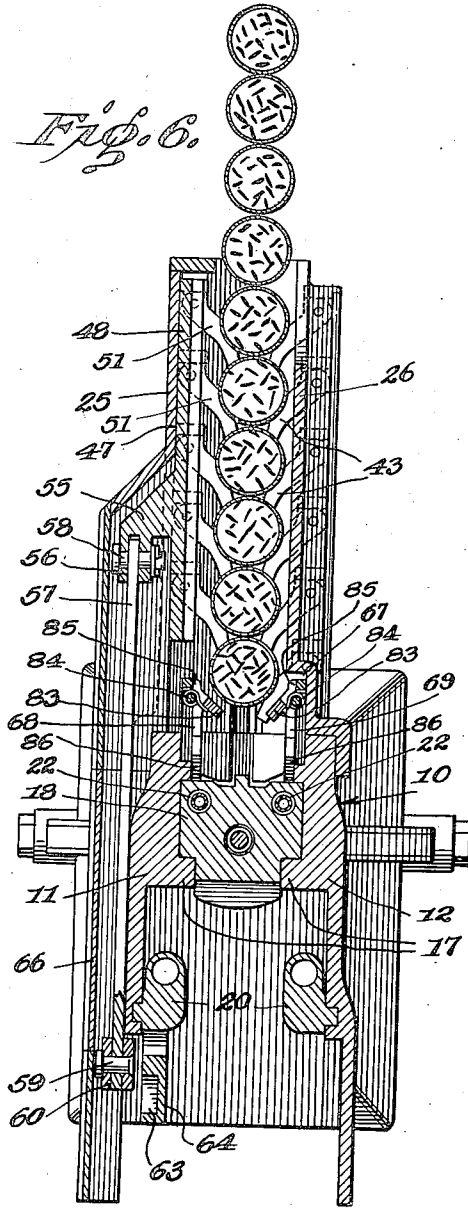
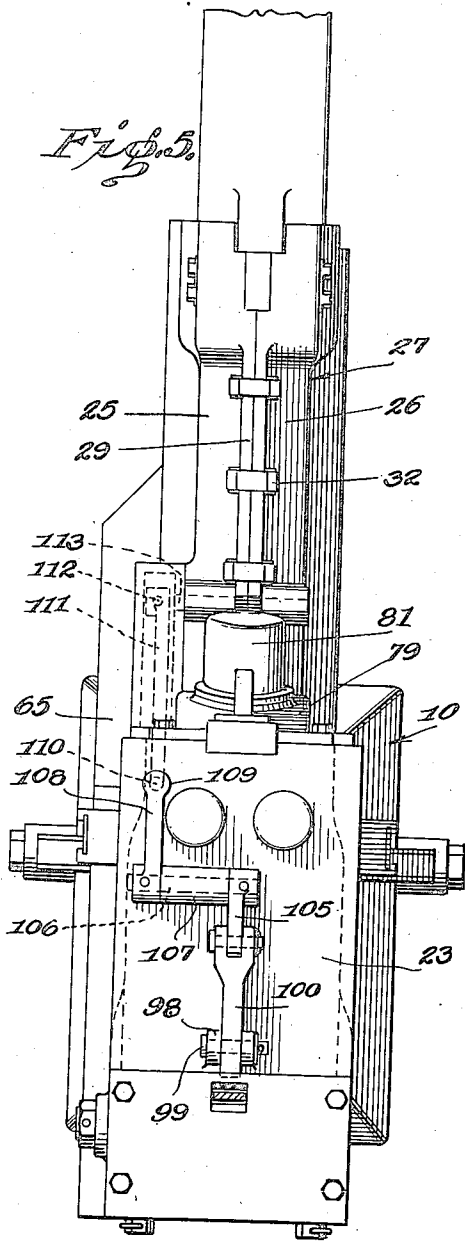
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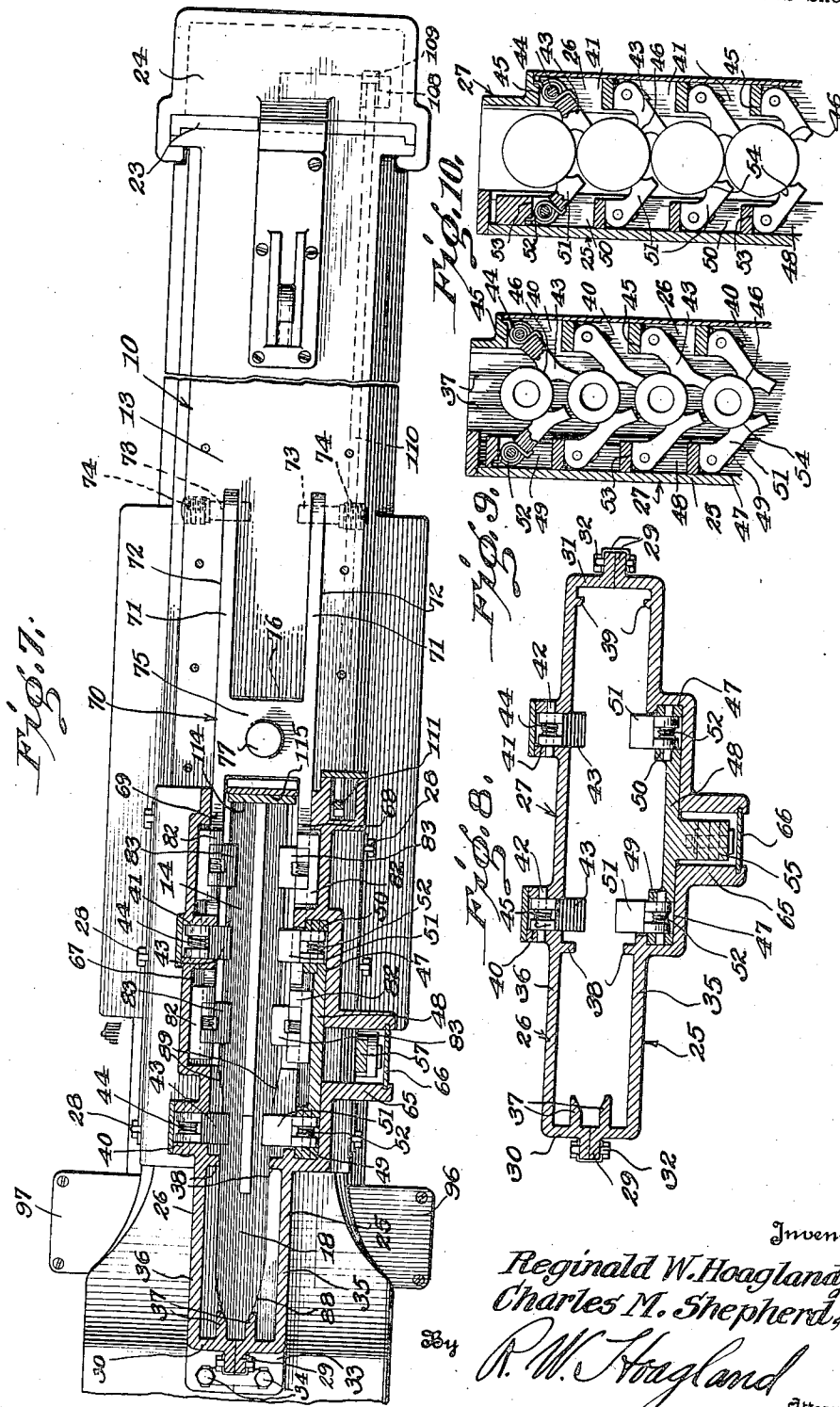
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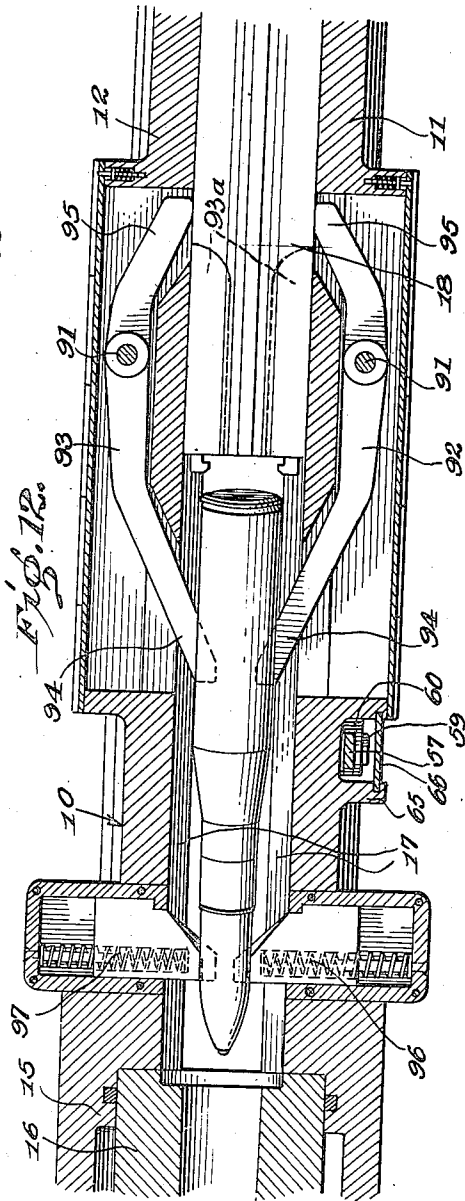
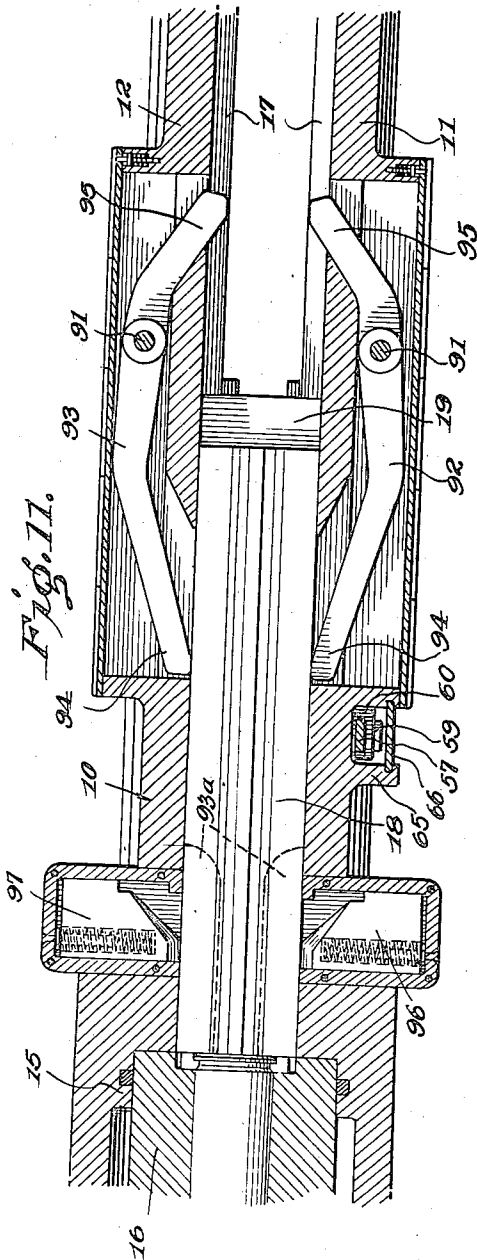
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CARTRIDGE FEED FOR GUNS

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## UNITED STATES PATENT OFFICE

2,192,677

## CARTRIDGE FEED FOR GUNS

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Application June 20, 1936, Serial No. 86,422

7 Claims. (Cl. 42-6)

This invention relates to a cartridge feeding arrangement for guns, and aims to provide a novel and improved mechanism of this character which will permit the supplying of cartridges continuously, the same being more especially adapted for use in connection with automatic and semi-automatic guns of large calibres.

Another object is the provision of a positive feeding shuttle in the housing operatively connected to the breech mechanism for feeding each cartridge to the position of the preceding one upon each reciprocal movement of the breech mechanism for extracting a cartridge case and feeding a cartridge, and at the same time permitting the filling in of any number of cartridges fed from the housing during the time required to replace another clip on the housing.

A further object of the invention is to provide a swinging cartridge positioning bracket for receiving the cartridges from the housing and positioning the same in front of the bolt of the breech mechanism, said swinging cartridge bracket being operated by the breech mechanism and arranged to hold the cartridges directed toward the chamber of the barrel until the points of the projectiles thereof have actually entered the chamber of the barrel by movement of the bolt thereby.

A still further object is the provision of a pair of cartridge rests pivotally carried by the receiver, one at each side thereof, upon which the cartridges are placed by the swinging cartridge bracket, when positioning the cartridges to enter the chamber, said cartridge rests being swung on their pivots by reciprocatory movements of the bolt in the receiver and being arranged above the center line of cartridge cases being extracted from the chamber for engaging the cartridge cases and forcing the same from the receiver.

Another object is the arrangement of a mechanism controlled by the cartridges in the housing for catching the breech mechanism in its rear position when the last cartridge leaves the housing, the same being so constructed that after the housing has been emptied and a new supply of cartridges have been furnished, the breech mechanism will be automatically released and moved to closed position for feeding the first of said cartridges into the chamber ready to be fired on operation of the trigger.

It is also an object of the invention to provide a cartridge feeding arrangement of the character indicated, which will be substantial in construction, which may be conveniently associated with guns during the manufacture thereof,

and which will be thoroughly efficient and practical in use.

With the foregoing and other objects in view which will be apparent as the description proceeds, the invention resides in the construction and arrangement of parts, as hereinafter described and claimed, it being understood that changes can be made within the scope of what is claimed, without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawings, wherein:

Fig. 1 is a side elevation of the receiver of a gun, showing the improved feeding arrangement applied thereto,

Fig. 2 is a similar view having portions thereof broken away,

Fig. 3 is a vertical section through the breech, cartridge housing, and clip, showing the breech mechanism in closed position,

Fig. 4 is a similar view to Fig. 3, with the upper portion of the cartridge housing broken away, and showing the rear end of the receiver with the breech mechanism in its rear position,

Fig. 5 is a rear elevation of the receiver, cartridge housing, and a portion of the clip,

Fig. 6 is a vertical cross-section on line 6-6 of Fig. 1,

Fig. 7 is a horizontal section on line 7-7 of Fig. 2,

Fig. 8 is a similar section on line 8-8 of Fig. 2,

Figs. 9 and 10 are fragmentary vertical sections on lines 9-9 and 10-10 respectively of Fig. 3,

Fig. 11 is a longitudinal horizontal section on line 11-11 of Fig. 3, showing the breech mechanism in closed position,

Fig. 12 is a similar section on line 12-12 of Fig. 4, showing the breech mechanism in its rear position.

Referring to the drawings, the numeral 10 designates the receiver of a gun having opposite side walls 11 and 12, a top wall 13 provided with a feed opening 14 near the forward end thereof, and a front portion 15 into which is secured the rear end of a barrel 16.

Slidably mounted in the receiver for reciprocatory movement and guided by rail 17 on the side walls 11 and 12 is a bolt 18 of a breech mechanism, said breech mechanism also includes a vertical movable lock 19 carried by the bolt and a lock actuating member 20 slidably mounted in the receiver and arranged to be reciprocated with the bolt.

A rod 21 extends through the forward portion



15 of the receiver and engages against the lock actuating member 20 and onto which is supplied a source of power for unlocking the breech mechanism and moving the same rearwardly. During such operation the spent cartridge case is extracted from the barrel and ejected from the receiver, and return springs 22 compressed. When power is relieved from the rod 21 the springs 22 move the breech mechanism forward feeding a cartridge into the chamber of the barrel.

On the rear end of the receiver 10 is a rear plate 23 which carries the rear ends of the return springs 22, and which is held in place by a rear closure member 24 attached to the opposite side walls 11 and 12 of the receiver.

In carrying out the invention 25 and 26 indicate the opposite disposed sections of a cartridge housing 27 attached to the receiver 10 by means of bolts 28 extending through depending flanges carried by the sections 25 and 26, and arranged on opposite sides of the receiver, said housing being positioned at the opening 14 in the receiver so that cartridges in the housing will be fed through said opening into the receiver. The two sections 25 and 26 are provided with forwardly and rearwardly extending flanges 29 at their adjoining or abutting front walls 30 and rear walls 31, through which bolts 32 extend for attaching the two sections of the housing 27 together. Also arranged for attaching the housing 27 to the receiver is a flange 33 carried by each of the sections 25 and 26 at their forward portions, which are secured to the receiver by means of bolts 34. From the foregoing it can be seen that a housing 27 has been provided having front and rear walls 30 and 31 respectively and opposite side walls 35 and 36.

Carried by the front wall 30 of the sections 25 and 26 is a pair of inwardly extending longitudinal guide ribs 37 for engaging the nose of projectiles of cartridges, while carried on the side walls 35 and 36 are oppositely disposed guide ribs 38 for engaging the rifle band of projectiles of cartridges, and while also carried by the side walls 35 and 36 are guide ribs 39 positioned slightly forward from the rear wall 31 of the housing for engaging into the extractor grooves of cartridge cases. By providing the vertically extending ribs 37, 38 and 39, it can be seen that cartridges arranged in the housing 27 will be held in proper position at all times, a structure of this kind being very essential when feeding cartridges having extraction flanges thereon of greater diameter than the bodies of the case portion, as the above referred to structure will prevent the flange of one cartridge case engaging into the extraction groove of an adjoining cartridge case.

The side wall 36 has two rows of openings 40 and 41 provided therein, each row extending upwardly in a vertical direction, and each opening having pivotally arranged therein, as at 42, a pawl 43 for engaging the cartridge cases to hold the same against upward movement. Each of the pawls 43 has a spring 44 thereon for yieldably holding the same against a stop 45 and in position for preventing the cartridges from backing up. By referring to Figures 9 and 10 of the drawings it can be seen that the pawls 43 are of a formation for not only holding the cartridges against upward movement in the housing 27, but also have surfaces 46 thereon for engaging and supporting the weight of the cartridges above the ones being held, said springs 44 being of sufficient tension to serve this purpose.

In the side wall 35 opposite to the one carrying

the pawls 43 is arranged a guide-way 47 for slidably supporting shuttle bar 48, which is also provided with two rows of openings 49 and 50 therein, positioned directly opposite to the two rows of openings 40 and 41 in the side wall 36. In the openings 49 and 50 are pivotally carried pawls 51, having springs 52 for yieldably holding the same outwardly, and stops 53 for limiting the outward pivotal movement of the pawls 51. Also on the pawls 51 are arranged surfaces 54 for engaging the shells above the ones to be moved by the pawls 51 in order to support the same during the time the shuttle bar 48 is in its uppermost position.

With the above referred to arrangement of pawls it can be seen that the pawls 43 will hold the cartridges against upward movement in the housing 47 when the shuttle bar 49 is moved upwardly in order that the pawls carried thereby may engage the cartridges directly above those just engaged, and when the shuttle bar is moved downwardly all of the cartridges in the housing 27 will likewise be moved downwardly until the same are engaged by the pawls 43, to hold the same in proper position.

Extending outwardly from the shuttle bar 48 is a lug 55 received in an outwardly formed compartment on the side wall 35. The lug 55 extends downwardly and is slotted as at 56 to receive the upper end of a shuttle connecting bar 57, said bar 57 being pivotally connected to the lug 55, as at 58, while the lower end of the bar 57 is pivotally connected, as at 59, to the forward end of a rocking arm 60 pivoted to the wall 11 of the receiver by means of the pivot pin 61. On the rear end of the rocking arm 60 is a roller 62 positioned in a cam groove 63 in a lower frame construction 64 carried by the lock actuating member 20.

The rocking arm 60, cam groove 63, connecting bar 57, and shuttle bar 48 are so positioned and arranged with respect to one another that when the breech mechanism is moved rearwardly in the receiver, the shuttle bar 48 will be pulled downwardly for feeding cartridges, and when the breech mechanism moves to closed forward position the shuttle bar 48 is raised so that the pawls thereon engage the cartridges above the ones just engaged to move the same to the positions of the preceding ones when the breech mechanism is again retracted. It will be noted that the cam groove 63 is slightly inclined for a considerable distance as it extends forward, that the same is then provided with a straight horizontal portion, and that the forward end of the cam groove is open. By having the inclined portion of the cam groove of considerable length and at a very slight angle, cartridges being fed will be handled more gently than if a greater angle for the cam groove was provided. The straight portion takes care of varied rearward movement of the breech mechanism, while the open end permits removal and assembly of the breech mechanism. The compartment that receives the lug 55 of the shuttle bar extends downwardly, as at 65, and also has contained therein the bar 57, and has grooves arranged therein for slidably receiving a removable plate 66 for permitting access to the various pivotal connections between the rocking arm 60 and the shuttle bar 48.

The lower portion of the side walls 35 and 36 of the cartridge housing 27 are enlarged, as at 67, as is the opening 14 for receiving the forward feed arms 68 and 69 of a substantially H-shaped swinging cartridge bracket 70. The rear arms 71 of the bracket 70 are received in slots 72 in the

top portion 13 of the receiver and are pivotally connected to the receiver at their rear terminal by means of trunnions 73 extending through openings in said arms and carried by threaded portions 76 secured in the receiver by threading the same inwardly from the opposite sides thereof.

The connecting portion 75 of the H-shaped bracket 70 is also received in a cutaway opening 76 in the top of the receiver and has an upstanding lug 77 thereon about which is arranged the lower end of a coil spring 78 for yieldably holding the swinging cartridge bracket in its downward cartridge feeding position. Attached to the top wall 13 of the receiver is a housing 79 for enclosing the rear portion of the bracket 70, which is provided with a threaded opening 80 for threadably receiving the lower end of a spring chamber 81 that extends upwardly and supports the upper end of the spring 78.

Each of the arms 68 and 69 of the pivoted cartridge bracket 70 has a pair of upwardly extending portions 82 which carry feed pawls 83. The feed pawls of one arm 68 of the bracket are arranged directly opposite to those on the other arm 69 thereof, and the forward pawls on both arms are arranged to engage a cartridge between the points where the cartridges are engaged by the pawls 43 of the side wall 36 and between the pawls 51 on the shuttle 48, while the rearward pawls on the feed arms 68 and 69 engage the cartridges slightly forward of the extraction flange portion thereof. The pawls 83 are pivotally carried by the feed arms 68 and 69 and have springs 84 connected thereto for normally holding the same in outward position for engaging a cartridge and are limited as to their outward swing movement by means of stop portion 85.

The lower edges of the arms 69 are engaged by the bolt 18 of the breech mechanism for controlling movement of the swinging cartridge bracket. When the breech mechanism is in its forward closed position the swinging cartridge bracket will be raised, and when the breech mechanism is moved to its rearward position and to the rear of the forward arms 68 and 69 the spring 78 will swing the bracket downwardly and the pawls 83 thereof will cause the shell engaged thereby to also be swung downwardly and in front of the bolt of the breech mechanism. By having the lower edges of the arm portions 68 and 69 angled as at 86 and provided with a short straight portion, as at 87, and having said angled portion 86 and straight portion 87 positioned on the arm with respect to the position of a cartridge being carried by said arm, it can be seen that the particular time in which it is desired to raise the cartridge bracket to its upper position can be determined, and this time is when the bolt of the breech mechanism has moved forwardly a sufficient distance to cause the nose of the projectile of the cartridge to enter the chamber of the barrel. With the angled surface 86 arranged at such point, it will not cause the feeding of a shell downwardly prior to the time the bolt of the breech mechanism is in rear of the cartridge, as the cartridge itself is the element which holds the bracket against swinging movement by the spring 78 after the bolt has passed the straight portion 87 and is still moving rearwardly.

Attention is now directed to the opening 14 in the top wall 13 of the receiver through which the cartridges are fed from the cartridge housing 27, which clearly illustrates in Fig. 7 of the drawings the opening 14 as being of a shape substantially to that of a cartridge. The forward end of the

opening is curved similar to that of the nose of the projectile of a cartridge, as at 88, while the opening 14 is enlarged in width at a point substantially midway of its length as it extends rearwardly, as at 89. At the enlarged place 89 the seat portion of a cartridge case is adapted to pass while moving downwardly from the cartridge housing 27 into the receiver. The opening 14 at the portion 89 thereof is enlarged at the lower side-walls for providing guide surfaces 90 to be engaged by the tapered portion of the cartridge case to cause the cartridge to be directed downwardly when moved slightly forward, thus preventing either the nose of the projectile or the base of the cartridge from raising when the cartridge is engaged and moved by the bolt 18.

On the side walls 11 and 12 of the receiver 10, substantially midway of their length, is pivotally mounted, as at 91, a pair of cartridge rest arms 92 and 93. The arm 92 is carried by the side wall 11, while the arm 93 is arranged in the side wall 12. The arms 92 and 93 are pivotally mounted intermediate therein, with both the forward ends 94 and the rear ends 95 angled inwardly to be engaged by the bolt of the breech mechanism during reciprocation thereof in the receiver for swinging the forward ends 94 of said arms inwardly or outwardly according to the position of the bolt. When the bolt 18 is in its rear position the forward end 94 of the arms 92 and 93 are held inwardly by the bolt so as to form a rest for a cartridge being fed downwardly by the swinging cartridge bracket 70, and remains in such position until a portion of the cartridge has been fed into the chamber of the barrel. As bolt 18 moves forwardly the forward ends 94 of the arms 92 and 93 will enter the slots 93a in the bolt and be cammed outwardly, thus causing the rear ends 95 of said arms to be swung inwardly. After the cartridge in the chamber has been fired and the bolt of the breech mechanism is moved rearwardly to extract same, said bolt engages the rear ends 95 of the arms, swinging the forward ends 94 thereof inwardly so as to eject the cartridge case being extracted from the chamber, and as the cartridge case is pulled straight back from the chamber of the barrel the forward end of the arms 94 will engage the same slightly above the center of said cartridge case and force the same downwardly from the extractors of the bolt and from the receiver.

Arranged forwardly of the forward end 94 of the arms 92 and 93 is a pair of spring urged cartridge rests 96 and 97 on which the projectile of the cartridge rests so as to hold the nose of said projectile in direct alignment with the chamber of the barrel. These spring urged cartridge rests 96 and 97 are also actuated by the bolt 18 of the breech mechanism, so as to be forced outwardly when said bolt is moved to forward or closed position, and to spring inwardly for supporting the next cartridge when the bolt has been retracted past the point of location of said element.

Extending rearwardly from the back plate 23 is a pair of ears 98 which pivotally support, as at 99, an L-shaped latch member 100, having an upstanding arm portion 101 and a forwardly extending arm portion 102 provided with a catch 103 on its forward end. The catch 103 is adapted to engage a downwardly extending lug carried 70 at the rear end of the lock actuating element 20 for holding the breech mechanism in rear position. The upper end of the arm portion 101 of the latch member is pivotally connected to the lower end of an arm 105 fixed to one end of a 75

shaft 106 which is journaled in a lug 107 also carried by the rear plate 23 and extending rearwardly therefrom. Fixed to the opposite end of the shaft 106 is an upstanding arm 108, the upper end of which is formed, as at 109, for engagement with the rear end of a sliding rod 110 mounted in the upper portion of the receiver 10. The forward end of the rod 110 abuts against the lower end of a lever 111, which is secured at its upper end, as at 112, to a trunnion 113 of a swinging member 114 normally arranged in a recess 115 provided in the rear wall 31 of the cartridge housing 27, said swinging member being pivoted to the housing as at 116. A spring 117 is positioned between the back plate 23 and the upstanding arm portion 107 of the latch member for applying a force tending to hold the catch 103 on the member 100 in a position for engaging the lug 104 of the lock actuating member and to hold the swinging member 114 outwardly into the path of movement of cartridges arranged in the cartridge housing 27.

By the above referred to arrangement it can be seen that when cartridges are positioned in the housing 27 the lowermost of which will hold the member 114 in its rear position with the catch 103 out of position for engaging the lug 104, and against tension of the spring 117. From the above it can be seen that when the cartridge housing 27 runs empty of cartridges the spring 117 will be permitted to swing the member 114 forwardly so that the catch 103 of the latch member 100 upwardly to engage the lug 104, and that when cartridges have been supplied to the housing the cartridges themselves will force the member 114 rearwardly thus disengaging the catch 103 from the lug 104 and permit the breech mechanism to be moved forwardly by means of the springs 22 and thus feed a cartridge into the chamber of the barrel.

In case it is desired to release the breech mechanism from its rear position without the feeding of a cartridge into the chamber of the barrel, a plunger element 118 is carried by the rear cover member 24, which consists of a bushing 119 threaded into the wall of the cover member 24 for slidably receiving a bar 120 having a head 121 on its forward end for engaging the arms 100 and 105 at the point of their pivotal connection, and a hand engaging knob 122 on its rear end, exteriorly of said closure member.

In operation cartridges are placed in the cartridge housing 27 with the breech mechanism in its forward position, such as that illustrated in Fig. 3 of the drawings, and then the breech mechanism is pulled back by hand, by the structure illustrated in Fig. 4 of the drawings, and to the position illustrated in such figure. Upon release of the breech mechanism the springs 22 will force the same forwardly feeding the cartridge held down in front of same by the swinging cartridge bracket into the chamber of the barrel, where said cartridge is fired, supplying a sufficient amount of power for moving the rod 21 rearwardly. Such rearward movement of the rod 21 applies pressure on the lock actuating member 20 to withdraw the lock 19 from locked position and then move said lock actuating member 20, lock 19, and bolt 18 rearwardly, extracting the spent cartridge case from the chamber of the barrel.

During the rearward movement of the breech mechanism the yieldable cartridge rests 97 are permitted to spring inwardly towards one an-

other as soon as the forward end of the bolt has passed same, and the rear end of the rocking bar 60 is moved upwardly by the cam groove 63 arranged on the lock actuating member 20, which causes the forward end of said locking bar 60 to be moved downwardly thus pulling the connecting rod 57 downwardly, which in turn pulls the sliding shuttle 48 downwardly and the pawl 51 carried thereby will feed each cartridge into the housing 27 downwardly to the position of the preceding cartridge, the lowermost of said cartridges being fed to a position to be engaged by the pawls 83 carried by the forward arms 68 and 69 of the swinging cartridge bracket 70.

As the breech mechanism continues to move rearwardly the rear ends 95 of the pivoted cartridge rest arms 92 and 93 are engaged by the bolt of the breech mechanism which causes the forward end 94 of said arm to be swung inwardly towards one another to engage the spent cartridge case being extracted from the chamber at a point above the center line of the cartridge so as to eject the same downwardly from the face of the bolt and through the receiver. When the bolt of the breech mechanism has been moved rearwardly to a position to the rear of the head of the cartridge held by the swinging cartridge bracket 70 the spring 78 will swing said cartridge bracket downwardly, positioning the cartridge held thereby in front of the face of the bolt with the nose of the cartridge resting upon the yieldable cartridge rests 96 and 97 and the case portion of the cartridge supported on the forward end 94 of the cartridge rest arms 92 and 93. The cartridge then is in a position directed towards the chamber of the barrel 16, and held down upon the rests 96, 97 and 94 by the pawls 83 on the swinging cartridge bracket 70.

When power is relieved from the rod 21, the springs 22 will move the breech mechanism in a forward direction. The face of the bolt 18 engages the base of the cartridge and slides the same forward between the various cartridge rests and the pawls 83 until the nose of the cartridge has entered the chamber of the barrel. At such time the bolt engages the angled surfaces 86 on the arms 68 and 69 to cam the forward end of the swinging cartridge bracket 70 upwardly to a position whereby the surfaces 87 of said arms 68 and 69 ride on the top surface of the bolt. As the breech mechanism continues to move forwardly the forward end 94 of the pivoted cartridge rest arms 92 and 93 will be swung outwardly, as will the yieldable cartridge rests 96 and 97. Also during such forward movement of the breech mechanism the cam groove 63 will swing the rocking arm 60 to a position for raising the shuttle 48 in the cartridge housing 27, so that the pawls 51 carried by the shuttle 48 will engage the cartridges above those previously engaged. During such raising of the shuttle 48 in the cartridge housing 27 the pawls 43 will hold the cartridges in said housing from being raised by the pawls 51 carried by the shuttle. It will be apparent as the bolt 18 of the breech mechanism continues to move forwardly the cartridge in front of same will be fed into the chamber of the barrel where the same will be fired and the operation continued.

Should the housing 27 run empty of cartridges the pivoted element 14 arranged in the lower rear portion of the housing 27 will be permitted to swing forwardly by the pressure applied on the arm 101 by the spring 117, which will cause the catch 103 carried by the lever 100 to engage the

lug 104 on the lock actuating member of the breech mechanism, thus holding the breech mechanism in its rear position. By then placing another clip on the housing 27 and feeding the cartridges therefrom into the housing the lowermost of said cartridges will engage the pivoted element 118 forcing the same rearwardly, which will cause the catch 103 to disengage the lug 104 and the lowermost of said cartridges just supplied to the housing will be fed into the chamber of the barrel by closing of the breech mechanism.

With this arrangement it can be seen that should the clip not be placed on the housing 27 prior to the emptying thereof, firing can be resumed without the necessity of retracting the breech mechanism by hand.

Having thus described our invention, what we claim as new is:

1. A cartridge feed for guns, in combination with a receiver provided with a feed opening therein and having a barrel attached thereto and a bolt of a breech mechanism mounted to reciprocate therein, comprising means for supplying cartridges through said feed opening, and a swinging bracket carried by the receiver and consisting of a pair of forwardly extending arms between which said cartridges are received, and yieldable members on said arms for holding the cartridges against upward movement from between said arms.

2. A cartridge feed for guns, in combination with a receiver provided with a feed opening therein and having a barrel attached thereto and a bolt of a breech mechanism mounted to reciprocate therein, comprising means for supplying cartridges through the opening, a swinging bracket carried by the receiver for receiving and holding cartridges fed through said opening, spring means for yieldably holding said swinging bracket downwardly when said bolt is in its rear position, and cam surfaces arranged for swinging said bracket upwardly against tension of said spring means when said bolt moves forwardly feeding the cartridges into the barrel.

3. A cartridge feed for guns, in combination with a receiver provided with a feed opening therein and having a barrel attached thereto and a bolt of a breech mechanism mounted to reciprocate therein, comprising means for supplying cartridges through the feed opening, a pivoted bracket carried by the receiver for receiving and holding cartridges fed through said opening with the cartridge received by the bracket positioned on top of the bolt, spring means for swinging the pivoted bracket downwardly when the bolt has been moved rearwardly past the rear end of the cartridge, and cam surfaces on the bracket to be engaged by the bolt for raising the bracket against tension of the spring means during forward movement of the bolt to feed the cartridge into the barrel.

4. A cartridge feed for guns, in combination with a receiver provided with a feed opening therein and having a barrel attached thereto and a bolt of a breech mechanism mounted to reciprocate therein, comprising means for supplying cartridges through the feed opening, a pivoted bracket carried by the receiver for receiving and holding cartridges fed through said opening with the cartridge received by the bracket positioned on top of the bolt, spring means for swinging the pivoted bracket downwardly when the bolt has been moved rearwardly past the rear end of the cartridge, cam surfaces on the bracket to be engaged by the bolt for raising the bracket against tension of the spring means during forward movement of the bolt to feed the cartridge into the barrel, said cam surface on said pivoted bracket being so positioned and arranged so that the nose of the cartridge is fed into the barrel prior to engagement of the bolt with the camming surface.

5. A cartridge feed for guns, in combination with a receiver provided with a feed opening therein and having a barrel attached thereto and a bolt of a breech mechanism mounted to reciprocate therein, comprising means for supplying cartridges to the feed opening; a swinging bracket carried by the receiver and consisting of a pair of forwardly extending arms between which the cartridges are positioned, yieldable pawls carried by each of said arms for engaging cartridges to hold the same against upward movement with respect to said arms; spring means for swinging said bracket downwardly when the bolt has moved to its rear position; and camming surfaces arranged on said arms and bolt for engaging one another to swing said bracket upwardly against tension of said spring means during feeding of the cartridge held between said arms by the bolt traveling in its forward direction.

6. A cartridge feed for guns, in combination with a receiver having a barrel attached thereto and a bolt of a breech mechanism mounted to reciprocate therein, comprising means for supplying cartridges into the receiver, a pair of cartridge rests pivotally carried by the receiver at opposite sides thereof for supporting cartridges fed into the receiver, said rests being pivoted intermediate their ends and each having both ends engaged by the bolt to actuate the rests in both directions during reciprocating movement of the bolt.

7. A cartridge feed for guns, in combination with a receiver having a barrel attached thereto and a bolt of a breech mechanism mounted to reciprocate therein, comprising means for supplying cartridges into the receiver, a pair of cartridge rests pivotally carried by the receiver at opposite sides thereof, for supporting cartridges fed into the receiver, said rests being pivoted intermediate their ends and each having both ends engaged by the bolt to actuate the rests in both directions during reciprocating movement of the bolt, said cartridge rests also being arranged above the center line of cartridges being extracted from the barrel so as to engage the said cartridge cases and force the same downwardly through the receiver.

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