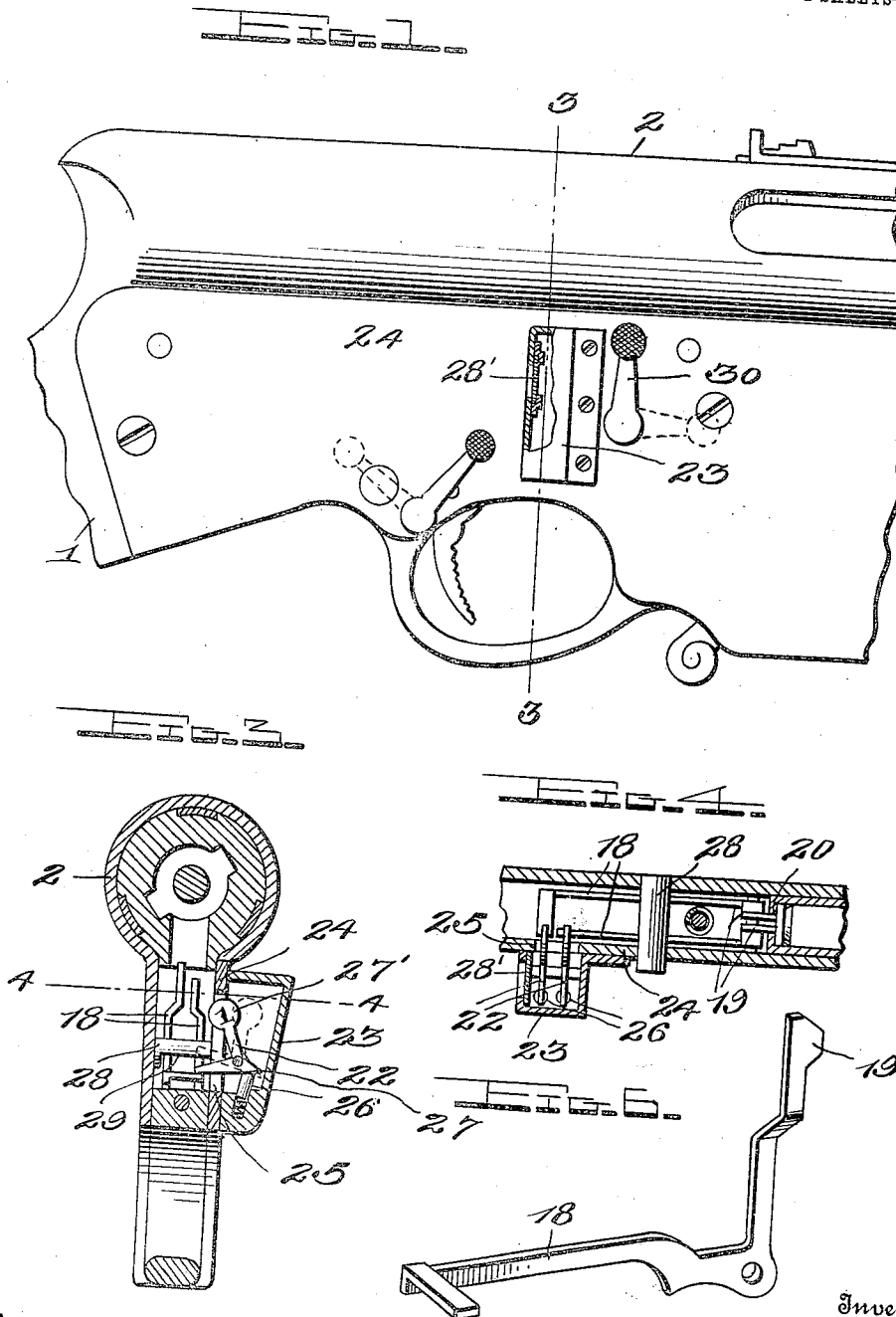


N. B. RANDALL,
MAGAZINE GUN.
APPLICATION FILED OCT. 12, 1912.

1,056,057.

Patented Mar. 18, 1913.
2 SHEETS—SHEET 1.



Witnesses

Chas. L. Griesbauer.
W. J. Hind.

Inventor

N. B. Randall,

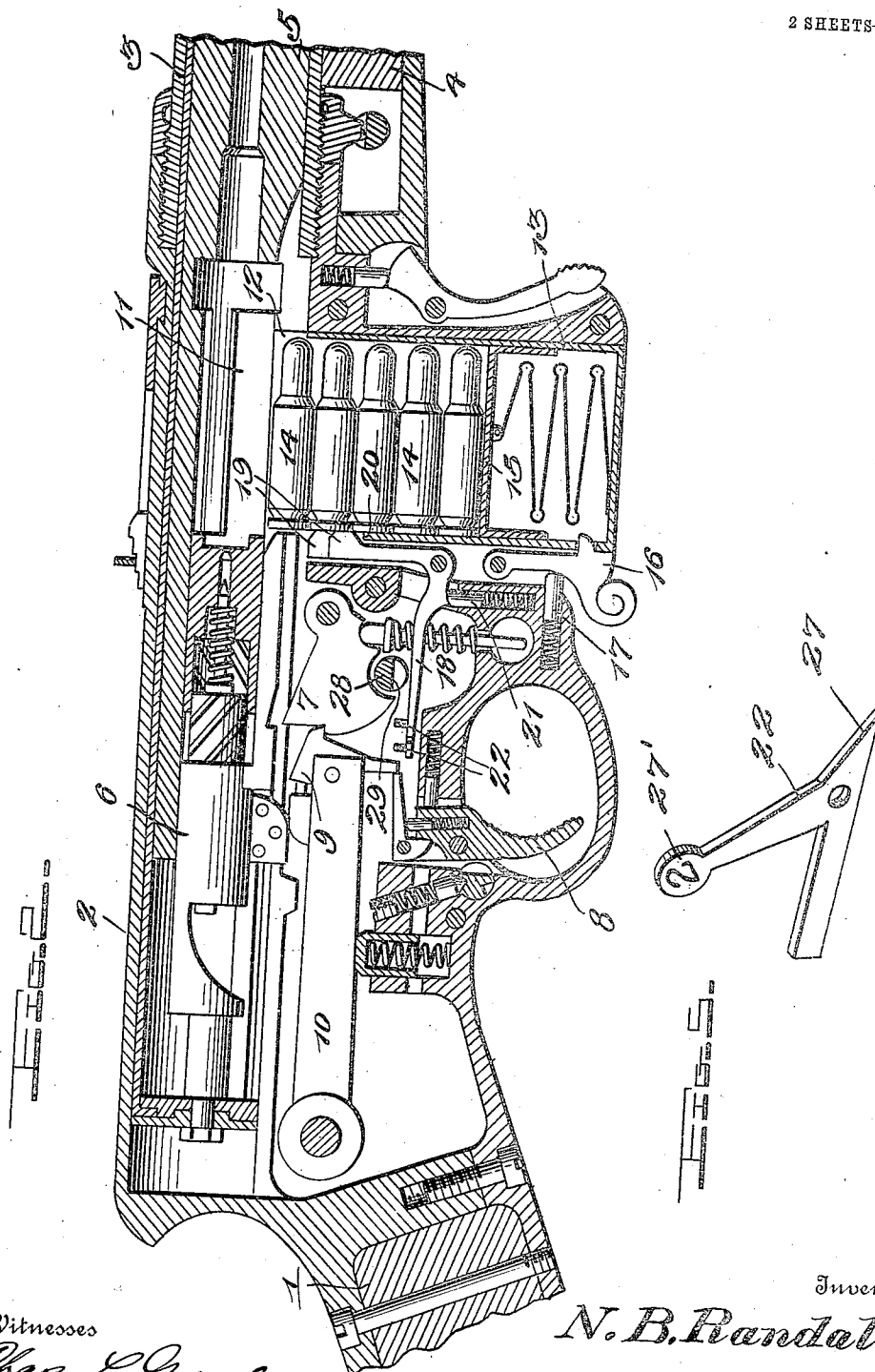
By

Watson E. Coleman,
Attorney

N. B. RANDALL.
MAGAZINE GUN.
APPLICATION FILED OCT. 12, 1912.

1,056,057.

Patented Mar. 18, 1913.
2 SHEETS—SHEET 2.



Witnesses
Chas. L. Grisham.
A. J. Ford.

Inventor
N. B. Randall,
By Watson E. Coleman.
Attorney

UNITED STATES PATENT OFFICE.

NORMAN B. RANDALL, OF BOSTON, MASSACHUSETTS.

MAGAZINE-GUN.

1,056,057.

Specification of Letters Patent.

Patented Mar. 18, 1913.

Original application filed February 14, 1912, Serial No. 677,544. Divided and this application filed October 12, 1912. Serial No. 725,483.

To all whom it may concern:

Be it known that I, NORMAN B. RANDALL, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Magazine-Guns, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in magazine guns, the same being a division of my pending application filed February 14th, 1912, Serial Number 677,544, and the primary object of the invention resides in providing an improved indicating means whereby the number of shells remaining in the magazine after a portion thereof have been fired may be readily noted by the gunner.

A further object of the invention resides in providing means which, while acting in the capacity of an indicating means, will also reserve the last shell of the magazine and a still further object resides in the provision of a means which is extremely simple and durable in construction, inexpensive to manufacture and one which will be very efficient and useful in operation.

With these and other objects in view, the invention consists in the novel features of construction, combination and arrangement of parts as will be hereinafter referred to and more particularly pointed out in the specification and claims.

In the accompanying drawings forming a part of this application, Figure 1 is a fragmentary side elevation of a gun showing my improved device applied to use thereon. Fig. 2 is a fragmentary vertical longitudinal section therethrough. Fig. 3 is a vertical transverse section as seen on line 3—3, Fig. 1. Fig. 4 is a horizontal section as seen on line 4—4, Fig. 3. Fig. 5 is a perspective view of one of the levers used in the indicating mechanism of the device; and Fig. 6 is a similar view of another one of the levers used in the indicating mechanism.

In describing my invention, I shall refer to the drawings in which similar reference characters designate corresponding parts throughout the several views and in which—

1 indicates a stock, such as is used in shoulder guns of the present day, to which is secured a metallic receiving casing or frame 2, said frame or receiver having an

upper tubular portion which has threaded into engagement therewith a barrel casing 3. This barrel casing is braced in the usual manner by the fore-arm 4 and slidably disposed in the barrel casing 3, is a barrel 5, the inner end of which has a breech block 6 slidably mounted therein. The frame 2 has pivotally mounted therein the usual hammer 7 and trigger 8, the latter operating the former through the medium of a sear 9 carried on the end of a lever 10 also pivoted in the frame 2. As the above referred to portions of the gun, together with their adjunctive parts form no part of my invention, further description of the operation and construction thereof will be omitted.

The barrel 5 has a chamber 11 formed adjacent the inner end of the same which is adapted to communicate, in a particular position of said barrel, with a chamber 12 formed in the frame 3. This chamber is positioned in the frame just forward of the trigger 8 and is adapted to receive therein a magazine 13 of the usual type containing a plurality of shells 14. This magazine being of the usual type contains a spring follower 15 to force the shells upwardly into position to enter the socket 11 of the barrel at a predetermined time and in order to lock said magazine in position, a pawl 16 is provided which is pivotally carried on the frame 2 and adapted to be operated by the gunner. This pawl is adapted to extend through an opening in the magazine to retain it in position as shown in Fig. 2 of the drawings and a spring forced pin 17 carried in the solid portion of the frame 2, immediately forward of the trigger guard normally retains said pawl in its effective position.

The primary object of my invention is to provide an indicating mechanism for the number of shells remaining in the magazine after a portion thereof have been fired and to this end, I provide a plurality of levers 18, I having shown but two in the drawings, said levers being L-shaped and pivoted at the intersections of the arms thereof, within the frame immediately in the rear of the magazine. These levers are so arranged as to normally dispose one arm of the same horizontally and the other arm thereof vertically, the vertical arms of said levers being provided with lugs 19 at the free ends of the same which are adapted to project through the respective slots 20 in the maga-

zine. These lugs 19 in projecting through the slots 20 are adapted to contact with the heads of the shells therein and spring forced pins 21 carried in the frame 2 normally contact with the horizontal arms of said levers to force the same upwardly and thereby normally retain the lugs 19 in the slots 20 of the magazine casing.

As shown the pair of levers which I have provided are adapted to contact respectively with the two upper shells of the magazine, but it will, of course, be understood that as many levers may be provided as are desired, and an additional pair of levers 22 are also provided, the same being pivotally mounted in a casing 23 on an axis at right angles to the pivotal axis of said levers 18. This casing 23 forms a projecting housing on the one face of the covering 24 which is provided for the parts of the gun, said covering having an opening 25 therein to allow the housing to communicate with the portion of the frame 2 inclosed within said covering. These levers 22 are also of the substantially L-shaped type and have the horizontal portions thereof in position to rest respectively on the horizontal portions of the levers 18, whereby when said latter levers are swung on their pivots, the levers 22 will also be swung. In order to normally retain the horizontal portions of the levers 22 in contact with the levers 18, the spring forced pins 26 are mounted in the bottom of the housing or casing 23 and engage projections 27 formed on said levers 22 and thus it will require a movement of the levers 18 in order to swing said levers 22 on their pivots.

The free ends of the substantially vertically extending arms of the levers 22 are provided with dials 27' upon which may be printed any indication desired which will represent the number of shells remaining in the magazine and the rear wall of the housing 23 is formed of glass or other transparent material as shown at 28', whereby the operator of the device may readily observe the dials as the same are brought into position.

As the shells with which the lugs on the vertical portions of the levers 18 contact, are discharged from the magazine, said levers will be swung on their pivots so that the free ends of the horizontal arms thereof will be swung upwardly and thus said levers 22 will be simultaneously swung on their pivots to allow the indications on the dials 27' to be observed by the gunner. In this manner, the number of shells remaining in the magazine after a certain portion thereof have been discharged, may be readily determined. The levers 18 are so arranged that when there are but two shells remaining in the magazine, the one of the levers 18 having the shorter vertical arm thereon may be permitted to swing on its pivot so that the lug

19 thereof will be disposed in the one slot of the magazine casing. The swinging of this lever on its pivot will, obviously, force the one indicating lever 22 to be swung on its pivot to correspondingly disclose the indicating disk, the latter showing the numeral 2 to disclose the number of shells remaining in the casing. When there is but one shell left, the other of the pair of levers 18 will be swung on its pivot to swing the corresponding indicating lever therewith and disclose the indicating disk having the numeral 1 thereon. When this last mentioned lever 18 is swung on its pivot, the free or raised end of the same interferes with the operation of the sear 9, so that the same cannot be moved by the trigger to release the hammer. Thus, this mechanism acts as a reserve for the last shell in the magazine, but I have also provided a means for disposing this one lever out of its interfering position with the sear and to this end, a pin 28 is extended transversely of the frame 2 immediately above the horizontal portions of said levers 18. This pin or shaft 28 has a flat portion 29 thereon which, when disposed downwardly facing the horizontal portions of the levers 18 will permit said levers to be swung on their pivots the full distance and thereby accomplish the desired result of reserving the last shell. When this pin 28 is turned by means of the hand lever 30, however, the round or full portion of the pin will contact with said horizontal portions of the levers 18 to force the same downwardly and out of the path of the sear 9. The sear may then be operated to allow the hammer to be released. This hand lever 30 is mounted on the one end of the pin 28 and is disclosed in Fig. 1 of the drawings, the same being in a position to be readily operated, at will, by the gunner.

From the foregoing description of the construction of my improved indicating mechanism, for magazine guns, the operation thereof will be readily understood and it will be seen that I have provided a simple, inexpensive and efficient means for carrying out the objects of the invention.

While I have particularly described the elements best adapted to perform the functions set forth, it is obvious that various changes in form, proportion and in the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the principles of the invention.

Having thus described this invention, what I claim is:—

1. In a fire arm, the combination with a frame having a chamber therein, a magazine disposed within said chamber, and means to lock said magazine in position in the frame; of a pair of levers pivotally carried on said frame and adapted to contact

with the contents of the magazine to swing said levers on their pivots as said contents are discharged, and means cooperating with said levers to indicate the number of shells remaining in the magazine after a certain number of the same have been discharged.

2. In a fire arm, the combination with a frame having a chamber therein, a magazine casing disposed within said frame and provided with a pair of slots in one end wall thereof, and means to lock said magazine casing in operative position in the frame; of a pair of angular levers pivotally carried on the frame and provided with lugs at one of their ends, spring means acting on said levers to normally dispose the lugs thereof through the openings in the magazine casing, and means cooperating with said levers to indicate the number of shells remaining in said magazine casing after a certain number of the same have been discharged.

3. In a fire arm, the combination with a frame having a chamber therein, a magazine casing disposed within said chamber, and means to lock said casing in operative position within the frame; of a pair of angular levers pivoted within the frame and adapted to cooperate with the shells within said magazine casing, and an additional pair of indicating levers also pivotally carried on said frame and cooperating with the aforesaid levers to disclose the number of shells remaining in said magazine casing after a certain number of the same have been discharged.

4. In a fire arm, the combination with a frame having a chamber therein, a magazine casing disposed within said chamber and provided with a pair of slots in the one end wall thereof, and means to lock said casing in operative position in the frame; of a pair of angular levers pivoted on a horizontal axis in the frame and provided with lugs at one of their ends, spring means acting on said levers adapted to normally dispose the lugs thereon through the slots in said casing, and an additional pair of indicating levers also pivoted on a horizontal axis at right angles to the pivotal axis of the aforesaid levers, said latter levers cooperating with the aforesaid levers to be operated simultaneously therewith.

5. In a fire arm, the combination with a frame having a chamber therein, a magazine casing disposed within said chamber and provided with a pair of slots in the one end wall thereof, means to lock said casing in operative position in the frame, and a housing secured to the frame and projecting from one side thereof, said housing being provided with a transparent rear wall; of a pair of angular levers pivoted on a horizontal axis in the frame and provided with lugs at their ends, spring means acting on said levers to normally dispose the lugs thereon

through the slots in said casing, an additional pair of levers also pivoted on a horizontal axis in the last mentioned housing at right angles to the pivotal axis of the aforesaid levers, said last mentioned levers cooperating with the first mentioned levers to be rotated thereby, and indicating means carried on said last mentioned levers to be readily observed through the transparent wall of said housing.

6. In a fire arm, the combination with a frame having a chamber therein, a magazine casing disposed within said chamber and provided with a pair of slots in the one wall thereof, means to lock said casing in operative position in the frame, and a housing carried on said frame and projecting laterally therefrom, said housing having communication with the interior of said frame and provided with a transparent rear wall; of a pair of angular levers pivotally mounted on a horizontal axis in the frame and provided with lugs at the ends of one of the arms thereof, spring means acting on said levers to normally dispose the lugs thereon through the slots in said casing, an additional pair of angular levers pivotally mounted in said housing on a horizontal axis at right angles to the pivotal axis of the aforesaid levers, additional spring means cooperating with said last mentioned levers to normally force one of the arms thereof in contact with one of the arms of said other levers, whereby the former will be operated simultaneously with the latter, and indicating means carried on said last mentioned levers adapted to be observed through the transparent wall of said housing.

7. In a fire arm, a frame, a magazine carried thereby, a pair of angular levers pivoted on said frame and having portions thereof adapted for cooperation with the contents of said magazine, said levers being adapted to be swung on their pivots as the contents of said magazine are discharged therefrom, means cooperating with said levers to indicate the number of shells remaining in the magazine after a certain number thereof have been discharged, and additional means cooperating with portions of said levers to prevent the discharge of the last shell from the fire arm.

8. In a fire arm, a frame, a magazine carried thereby, a pair of slots in one side thereof, a pair of angular levers having portions of one arm thereof adapted to enter the slots of the magazine to cooperate with the shells therein, said levers being adapted to be swung on their pivots as the shells are discharged from the magazine, means cooperating with portions of said levers to indicate the number of shells remaining in the magazine after a certain number thereof have been discharged, and additional means cooperating with one of said levers to pre-

vent the same from being swung to its full degree as the shells are discharged from the magazine.

9. In a fire arm, the combination with a frame having a barrel formed thereon, and a firing mechanism mounted on said frame; of a magazine also carried on the frame, a pair of angular levers pivotally carried on the frame and having portions thereof adapted for coöperation with the shells within said casing, said levers being adapted to be swung on their pivots as the shells are released from the magazine, and one of said levers, when swung on its pivot, being adapted to act on said firing mechanism to prevent the operation of the latter.

10. In a fire arm, the combination with a frame having a suitable barrel thereon, said frame being also provided with a chamber, and a firing mechanism mounted on the frame; of a magazine mounted in the chamber in said frame, said magazine being pro-

vided with slots on one side wall thereof, a pair of angular levers pivotally mounted on the frame and having lugs formed at one of the ends thereof, spring means acting on said levers to normally force said lugs through the slots of said magazine in contact with the shells therein, whereby to swing said levers on their pivots as said shells are released from the magazine, one of said levers, when swung on its pivot, by release of a shell from the magazine, having a portion thereof in position to prevent the operation of the firing mechanism, and means to swing said last mentioned lever out of the position last referred to.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

NORMAN B. RANDALL.

Witnesses:

GEO. M. YOUNG,
WM. H. JARVIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."