A. H. R. DE LEMPDES,
CARTRIDGE INDICATOR FOR REPEATING OR AUTOMATIC SMALL ARMS.
APPLICATION FILED OCT. 7, 1916.

1,252,094. Patented Jan. 1, 1918.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Inventor

Adolphe Henri Bichet de Lempdes
by Attorney

his Attorney
To all whom it may concern:

Be it known that I, ADOLPHE HENRI ROCHELLE DE LEMPIEES, citizen of the French Republic, residing at Senonches, Eure-et-Loir, France, have invented new and useful Improvements in Cartridge-Indicators for Repeating or Automatic Small-Arms, of which the following is a specification.

My invention relates to a cartridge indicator for automatic or repeating fire arms, and its principal object is to provide a simply constructed and efficiently operating device for indicating, at any given time, the number of cartridges contained in the magazine of an automatic or repeating fire arm, such as an automatic pistol.

The invention consists, essentially, of a moveable cartridge carrier or support whose movement is arranged to actuate the indicator for disclosing the number of cartridges contained in the magazine.

Two forms of the invention are illustrated in the accompanying drawings, to-wit:

Figure 1 is a side elevational view of the preferred form of cartridge indicator;

Figure 2 is a similar view with a lateral wall of the casing removed, and the magazine empty;

Figure 3 is a similar view with a lateral wall of the casing partly broken away, three cartridges being shown in the magazine; and

Figure 4 is a view similar to Figure 3 of a somewhat modified form of the invention.

Referring to the drawing, and particularly to Figures 1 to 3, A denotes a casing constituting the magazine in which the cartridges B are contained.

Movable within the casing A, lengthwise thereof, is a cartridge support C which preferably comprises a shelf upon which the cartridges may rest, and a downwardly turned flange D which may slide along the inner face of the rear wall of the casing and assist in guiding the support C in its movement.

Arranged between the lower face of the support C and the inner face of the base of the casing A is a coiled spring E having a normal expansive tendency whereby the cartridge support C is forced upwardly within the magazine.

Pivotedly connected at 3 to the support C is a rod F having a pin G at or near its lower end. The rod F extends into a cylinder H provided with a curved slot I into which the pin G on the rod F extends. The cylinder H telescopes with a cylinder J, the latter being provided with a curved slot K through which extends a pin L carried at or near the lower end of the cylinder H.

The cylinder H telescopes into a cylinder M provided with a curved slot N into which extends a pin O carried at or near the lower end of the cylinder H.

The lower end of the cylinder M revolves in a fixed socket P at the base of the magazine, and intermediate its ends the cylinder M carries a sleeve Q provided with suitable indicating characters, such as the numerals shown in the drawing.

At a point in line with the sleeve Q the casing A is provided with an opening or window R through which the numerals on the sleeve may be read.

In the form of Figure 4 I dispense with the telescoping sleeves S, T and U, and use in lieu thereof a single rod V provided with a helical slot W into which projects a pin (not shown) carried by a sleeve X, embracing the rod V, and carried by the rod Y pivotally connected to the cartridge support C. The lower end of the rod Y bears in a socket W, and adjacent such lower end the rod Y carries the numeral sleeve X. In other respects the construction of the modified form is like that of the preferred form.

The parts are so constructed and correlated that the cylinder M, or the rod V, carrying the numeral sleeve Q, will make one complete revolution each time the cartridge carrier C is moved, either to its extreme low or high position, and with this understanding, the operation is as follows:

In the form of Figures 1 and 3, when the magazine is charged with cartridges by placing the latter on the carrier C, such carrier will be depressed until it has reached its lowermost position in the casing A, and 96 will show through the window R, indicating that the magazine contains seven cartridges, which is its assumed capacity. When the pistol in which the device is arranged is used, the cartridges will pass successively from the magazine, and as each cartridge is used the spring E will raise the carrier C a certain distance, moving the rod F upwardly and causing the cylinders H and J to rotate and to rise, while the cylinder M will only rotate, and carry with it the numeral sleeve Q so that successive numbers will show through the window R. The number appearing at
the window at any given time indicates the number of cartridges in the magazine.

In the form of Fig. 4 the movement of the sleeve 11* along the rod 12 will rotate the latter and with it the numeral sleeve 9 and the indicating operation is the same as in the other form of the invention.

The invention is susceptible of considerable detail modification, and I desire it to be understood that the invention is not limited to the details shown and described.

What I claim as new and desire to secure is:

1. In a device of the character described, the combination with a casing having a peripheral opening therein, of a cartridge carrier movable longitudinally within said casing, means tending to normally force said carrier toward one end of said casing; a revolving member extending lengthwise of said casing therein, indicating means on said revolving member contained wholly within said casing and adapted to show through the opening therein, and a connection between said carrier and said revolving member whereby the latter is revolved coincidentally with the longitudinal movement of the carrier in the casing.

2. In a device of the character described, the combination with a casing having a peripheral opening therein, of a cartridge carrier movable longitudinally within said casing, said carrier comprising a shelf for receiving cartridges and a depending flange slideable along a wall of the casing, means tending to normally force said carrier toward one end of said casing; a revolving member extending lengthwise of said casing therein, indicating means on said revolving member contained wholly within said casing and in line with the opening therein, and a connection between said carrier and said revolving member whereby the latter is revolved coincidentally with the longitudinal movement of the carrier in the casing.

3. In a device of the character described, the combination with a casing having an opening therein, of a cartridge carrier movable longitudinally within said casing, means tending to normally force said carrier toward one end of said casing; a cylinder revolubly mounted within the casing and extending lengthwise thereof, a pin and slot connection between said cylinder and said carrier, and an indicating number in line with the opening in the casing and adapted to be actuated by the revolution of said cylinder.