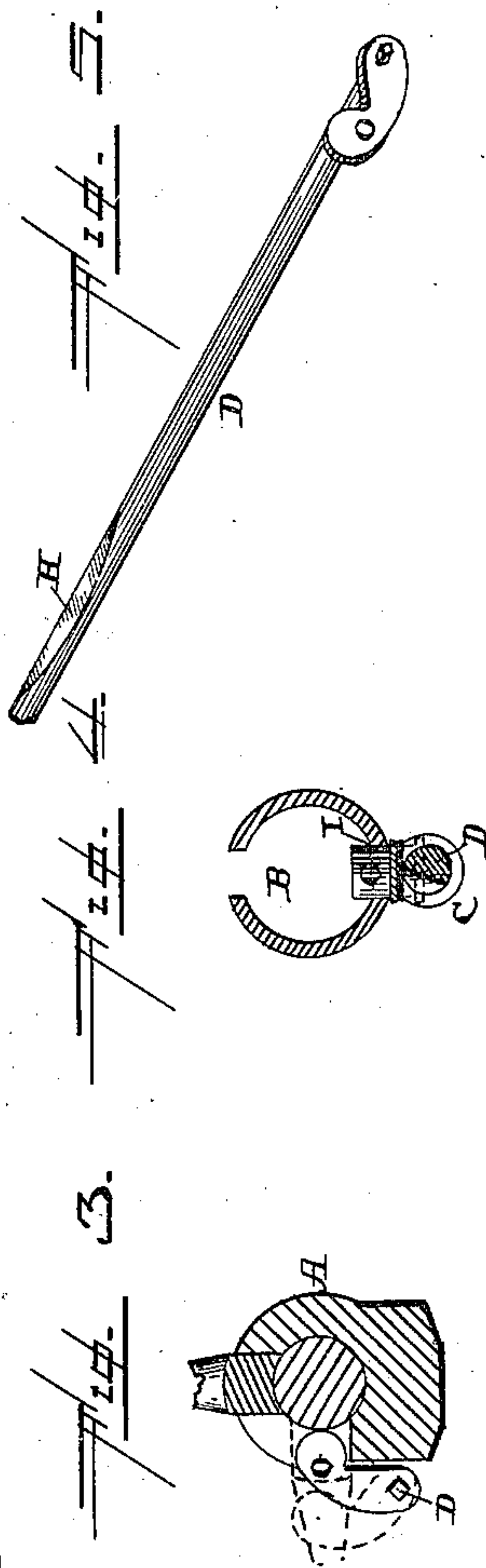
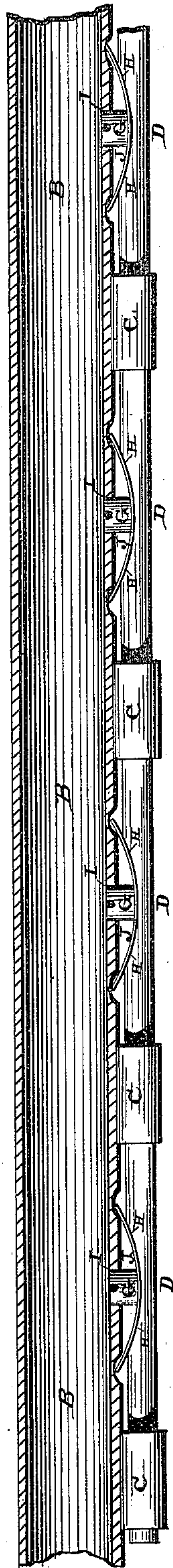
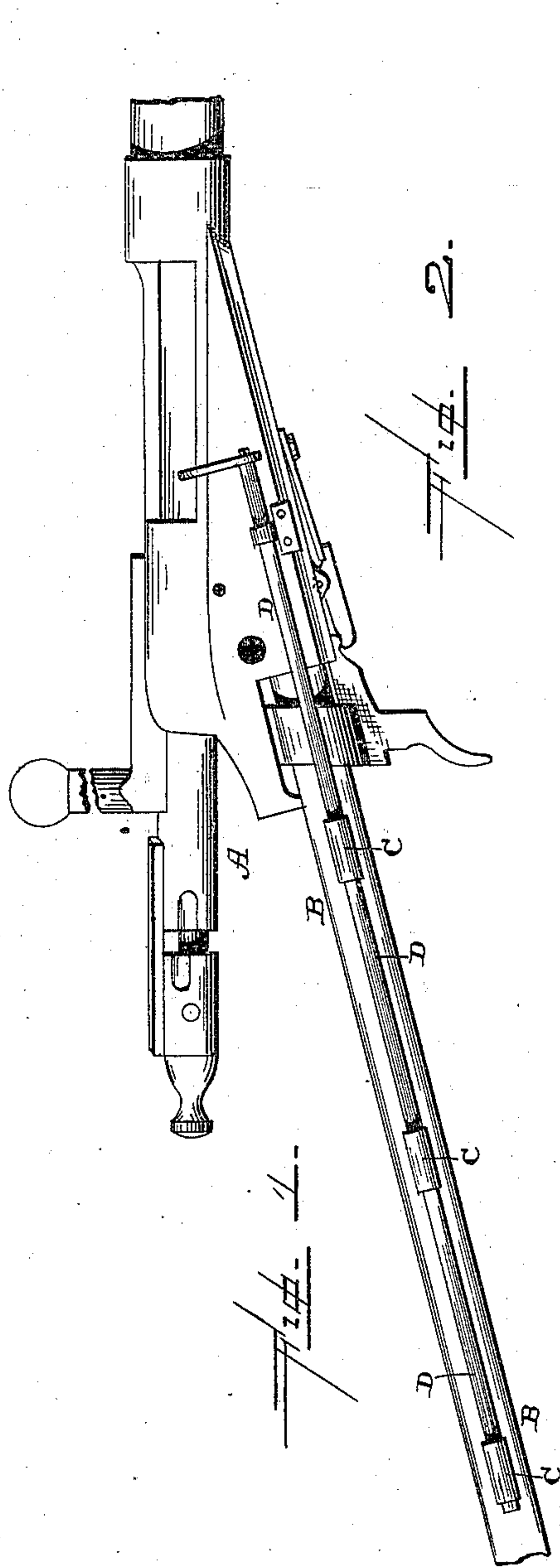


(No Model.)

R. T. HARE.
MAGAZINE FOR FIRE ARMS.

No. 332,896.

Patented Dec. 22, 1885.



—WITNESSES—

L. J. Gardner
John E. Prosper

—INVENTOR—

R. T. Hare
per
J. A. Lehmann,
att'y.

UNITED STATES PATENT OFFICE.

RICHARD T. HARE, OF SPRINGFIELD, MASSACHUSETTS.

MAGAZINE FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 332,896, dated December 22, 1885.

Application filed August 24, 1885. Serial No. 175,127. (No model.)

To all whom it may concern:

Be it known that I, RICHARD T. HARE, of Springfield, in the State of Massachusetts, have invented certain new and useful Improvements in Breech-Loading Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in breech-loading fire-arms; and it consists in the combination of a magazine-tube having suitable openings through one of its sides, the operating-rod, which has a number of cam-surfaces formed in one of its sides, and a cam attached to its upper end for the purpose of causing the rod to partially rotate when the firing-bolt is turned down, a series of grooved plugs which work through the openings in the side of the tube, and springs which are attached to the plugs for the purpose of retracting them when the operating-rod is partially turned, all of which will be more fully described hereinafter.

The object of my invention is to operate the partially-rotating cam-rod, which extends parallel with the tube in which the cartridges are placed, and to cause this cam-rod to force the plugs inward through the side of the magazine-tube, and thus cause the plugs to catch over the flanges of the cartridges and hold them out of contact with each other.

Figure 1 represents a portion of a breech-loading fire-arm to which my invention is applied. Fig. 2 is a side elevation of my invention, the magazine-tube being shown in sections. Figs. 3, 4, 5 are detail views.

A represents a portion of a breech-loading fire-arm in which a firing-bolt of any suitable construction is used. The magazine-tube B extends through the stock of the gun in the usual manner, and connects with the operating parts of the fire-arm at its upper end. Secured to the side of this tube B are a suitable number of guides or keepers, C, through which the operating-rod D is made to pass. This rod D is cut away upon one side at suitable intervals apart for the purpose of forming cam-surfaces, and the keepers are prefera-

bly placed one upon each side of each cam-surface, so as to hold the rod in position and prevent it from springing outward when it is revolved so as to operate the grooved blocks G opposite each cut-away surface H in the rod D. There is made an opening, I, in the side of the tube B, and through this opening a grooved block, G, is made to play back and forth for the purpose of alternately catching over the flanges of the cartridges for the purpose of holding them out of contact with each other, and to allow the cartridges to be forced forward by a coil-spring in the usual manner. Each one of these blocks G is connected in any suitable manner to a spring, J, which serves to draw the block backward as soon as the spring is left free to move. These springs are not connected to the tube B or rod D for the purpose of being held in position, but simply have their ends held in suitable recesses made in the side of the tube B, and are held in place between the tube and the rod D by means of the plugs G and the pressure of the rod D against their outer sides. By thus holding the springs in position the use of rivets or other similar devices is entirely done away with. When the rod D is caused to partially revolve by the turning down of the firing-bolt, as shown in dotted lines in Fig. 3, the cut-away parts H of the rod D are turned away from the springs, and then the round portions of the rod act as cams, as shown in Fig. 4, so as to press the springs against the side of the tube and force the plugs G through the openings I into the tube, so as to cause the plugs to catch over the flanges of the cartridges. Secured to the upper end of the operating-rod D is an arm, cam, or lever, O, which has its free end projecting slightly over the side of the receiver, so that when the firing-bolt is forced forward into position, and then turned down, this arm, lever, or cam O is forced outward, so as to partially revolve the rod D for the purpose of causing the rod to force the plugs inward, and thus catch over the flanges of the cartridges. When the bolt is in position ready for firing the gun, the plugs G are holding their respective cartridges so that they cannot move; but when the bolt is forced backward the rod D is forced by the springs J into the position shown in Figs. 1 and 2, so that the springs J

will draw the plugs G back out of contact with the cartridges, and thus leave the spring free to push the cartridges forward into position. The springs J automatically return the rod D to position as soon as the bolt is drawn back. The springs J are made to operate both the plugs G and the rod D without the help of any special spring or other appliance for causing the rod D to turn. By having the plugs catch over the flanges of the cartridges the cartridges are held out of contact with each other, and hence there will never be any danger of an explosion in the magazine tube by the striking of one cartridge against the other.

Having thus described my invention, I claim—

1. In a breech-loading fire-arm, the combination of the magazine-tube having perforations through its side, with the plugs which pass through the perforations and catch over the flanges upon the cartridge, the springs which are applied to the plugs and between the side of the magazine tube and the operating-rod,

and the partially-revolving operating-rod provided with the cut-away or cam surfaces in its side, and an arm or lever which is operated by the firing-bolt for the purpose of partially revolving the rod, substantially as shown and described.

2. In a breech-loading fire-arm, the combination of the magazine-tube, an operating-rod which is applied to and extends parallel with this tube, suitable keepers for holding the rod in position, the spring-actuated plugs, which are moved in one direction by the cam-surface on the rod and in the other direction by springs which are applied to them, the arm or lever O, which is secured to the upper end of the operating-rod and the firing-bolt, substantially as set forth.

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

RICHARD T. HARE.

Witnesses:

F. A. LEHMANN,
WM. G. MARKHAM.