(No Model.)

S. J. MIXTER.

CHARGER FOR MAGAZINE FIRE ARMS.

No. 391,811. Patented Oct. 30, 1888.

Fig. 1.

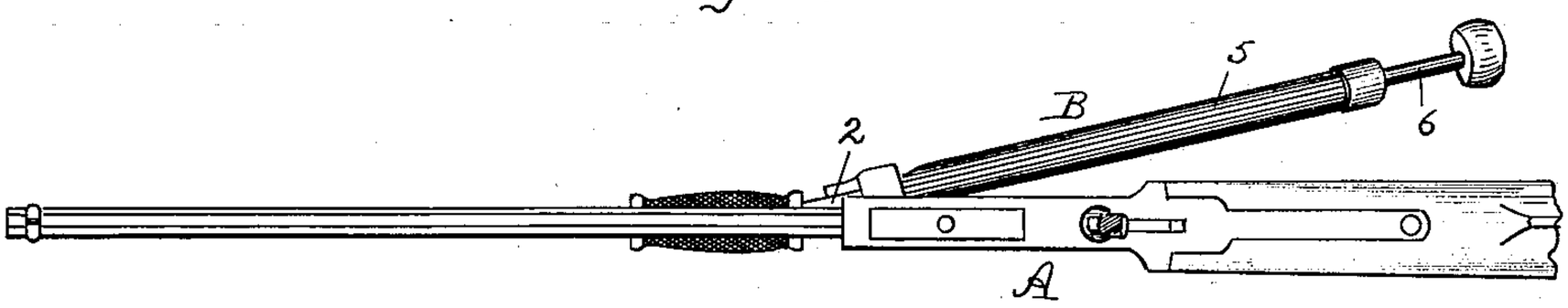


Fig. 2.

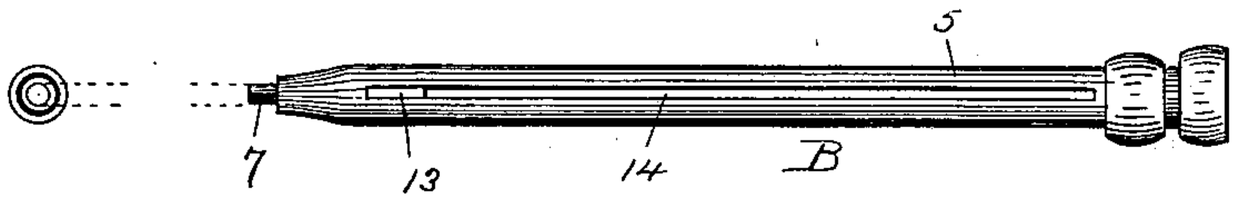


Fig. 3.

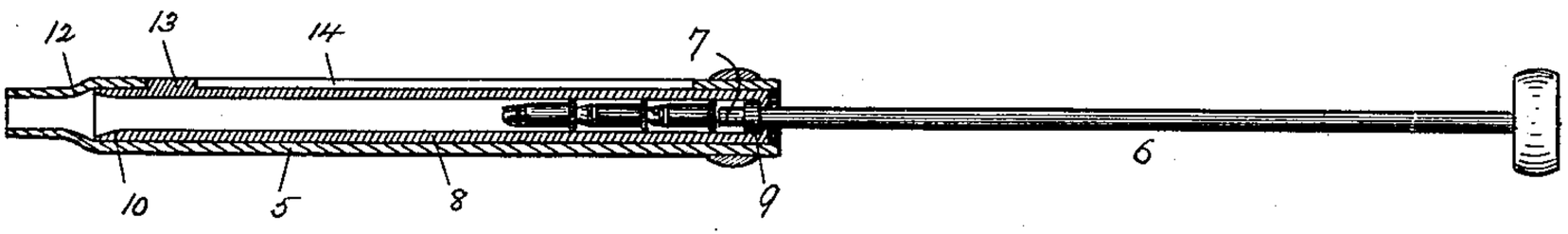
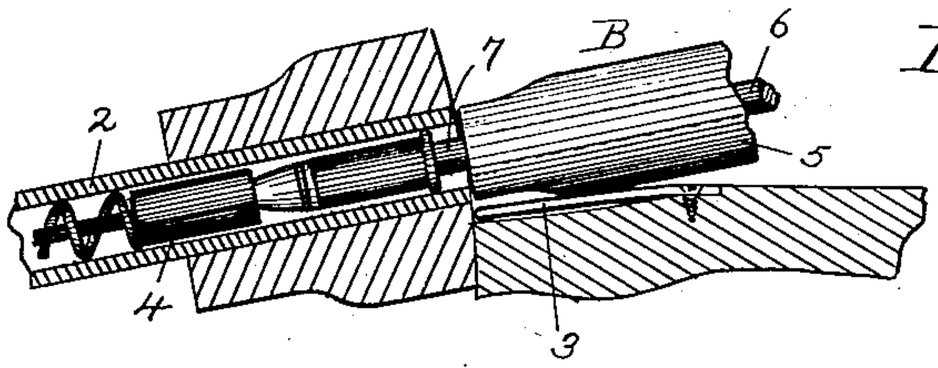


Fig. 4.



enlarged.

Witnesses.

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CHARGER FOR MAGAZINE FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 391,811, dated October 30, 1888.

Application filed March 9, 1888. Serial No. 266,739. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL J. MIXTER, 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 Implements for Filling Magazines in 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to "magazine fire-arms," so called, especially that class in which a series of cartridges contained within a hollow cylinder or magazine aligned beneath the barrel of the weapon are successively fed to operating mechanism which delivers them into the discharge-chamber. The feed movement of said cartridges from said magazine is effected by a follower and a coiled spring.

The object of my invention is to provide an improved implement by which a series of cartridges can be easily introduced into the magazine and be compelled to follow each other and pass continuously along against the accumulating power of the spring in the act of filling said magazine. Furthermore, of such an arrangement of parts that the coiled spring and follower may be employed to discharge the contents of said magazine into the implement if it is desirable to empty said magazine.

My invention consists, primarily, of a hollow tube or a series of tubes adapted to close telescopically upon each other and somewhat larger in diameter than the cartridges which are to enter them; secondly, in connection with said tube or series of tubes of a plunger which is to be somewhat longer than the length of a tube, or that of the sections when closed one within the other, for purposes which will be more fully hereinafter described.

The drawings represent, in Figure 1, a top view in part of a Colt magazine-rifle, showing loading implement embodying my invention and in its active position. Fig. 2 is a plan of the implement with the plunger in its closed position. Fig. 3 is a longitudinal central section of the same with the plunger withdrawn. Fig. 4 represents the relative position of the loading implement with the mouth of the magazine after the act of filling or prior to the emptying of the magazine, if so desired.

The accompanying drawings represent at A a top view of a Colt magazine-rifle. In this weapon a short piece of the rear portion of the magazine 2 is arranged to swing laterally in order to expose and open the mouth of the magazine, and thereby enable a cartridge or series of cartridges to be inserted within the bore. A spring-actuated plate, 3, located on the side of the breech-block, serves to engage the end of the follower 4 when the magazine is empty and when filled to overlap the rim of the cartridge, but at the same time yields during the insertion of the cartridge to permit of a free passage of the latter within the magazine.

In the ordinary act of filling a magazine in the above class of weapons the cartridges have been inserted manually one at a time; but since the spring which actuates the follower becomes more and more compressed by the addition of each successive cartridge the introduction of each additional cartridge is attended with greater difficulty, and the time required for completely filling the magazine is not only considerable, but attended with much effort.

In Fig. 2 I have shown an implement, B, for filling the magazines of fire-arms as above specified; and it consists, primarily, of a cylindrical tube somewhat contracted at its front end and adapted to receive a piston or plunger rod, 6, furnished with a knob or handle, and made somewhat longer than the tube within which it reciprocates. Its projecting end is indicated at 7 in Fig. 2.

In some instances, and if desired, a single length of tube may be employed, and this can be refurnished one or more times to fill the magazine.

In the present drawings I have shown two lengths telescopically arranged which will readily hold sixteen cartridges. The inner tube, 8, is of a size to freely admit the cartridges and is closed at the rear end, which is bored to permit the plunger-rod to play through it. Said rod 6 is provided with a col-

lar or an enlarged portion, 9, to prevent its withdrawal entirely. The front end of said inner tube is beveled at 10 to facilitate the entrance of the cartridges within it, while the bend 12 of the outer tube, where it is contracted, serves to guide the cartridges when passing out.

A fin or guide, 13, secured upon the front end of the tube 8, and engaging in a longitudinal slot, 14, in the outer tube, 5, serves to limit the travel of the tube in either direction, the rear end of the outer tube being open. The projecting extremity 7 of the plunger-rod 6 is adapted to freely enter the bore of the magazine.

The operation of my implement is as follows: The plunger-rod 6 is withdrawn from the tube 8. The latter is retracted from the tube 5 when the cartridges are inserted, as indicated in Fig. 3, until a sufficient number has been entered. The weapon is then placed, preferably, in a horizontal position and the mouth portion of the magazine 2 is swung to one side. The nose of the tube 5 is placed against the mouth of the magazine. This act will depress and move the closer-plate 3, when the cartridges are free to enter. A continuous thrust or push inward of the plunger-rod 6 will at once introduce by force a number of cartridges, (those contained in the tube 5,) while those in the tube 8 advance as the plunger enters and occupies the bore of the latter. Further advance movement of the tube 8 and plunger together will now empty the outer tube, and the entire number of cartridges in the implement will have been almost simultaneously introduced within the magazine, and but little or no effort is required to perform this act against the accumulated pressure of the spring which actuates the follower. It is manifest that in the final act of loading the projecting end of the plunger-rod is in contact with the rearmost cartridge. By this means the follower is prevented from expelling cartridges when the closer-plate 3 is depressed by the nose of the tube 5 when said tube is positioned at the mouth of the magazine. Moreover, the plunger-rod is last in contact with the weapon; hence, after filling the magazine, the tube 5 of the implement is withdrawn, permitting the closer-plate 3 to lift and engage the rim of the rearmost cartridge. Escape of the latter is thereby prevented upon withdrawal of the plunger-rod 6, which immediately occurs. Discharging the cartridges from the magazine is easily effected by reverse movements. The implement B, with the plunger-rod in position home, as shown in Fig. 2, is placed at the mouth of the magazine. The plunger now holds the cartridges against the pressure of the follower-spring until the closer-plate is fully depressed by the nose of the implement, now aligned with the bore of the magazine. The plunger is now released and the accumulated pressure of the spring within the magazine forcibly expels the cartridges, which are received within the tube-sections, when the implement B is removed.

If a single tube is employed, it is evident the contraction at the front end will not be required.

What I desire to claim is—

1. In magazine fire-arms, the combination, with a spring-actuated follower contained in the magazine and the closer-plate normally closing the mouth of the magazine, of a filling implement provided with two or more telescopically-sliding tubes and a plunger-rod of a length adapted to project beyond the open end of the implement and enter within the mouth of the magazine, substantially as herein set forth.

2. The combination, with the tube 5, contracted at its open end and having a longitudinal slit, 14, of the tube 8, its guide 13, and the plunger-rod 6, with its enlarged portion 9, all operating substantially as herein described.

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

SAMUEL J. MIXTER.

Witnesses:
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