(No Model.)

H. A. LEWIS.

CARTRIDGE FEED CASE.

No. 283,122. Patented Aug. 14, 1883.

Fig 1

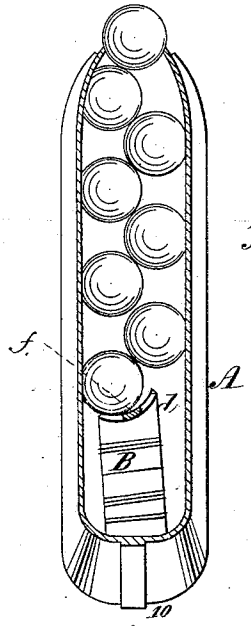


Fig 2

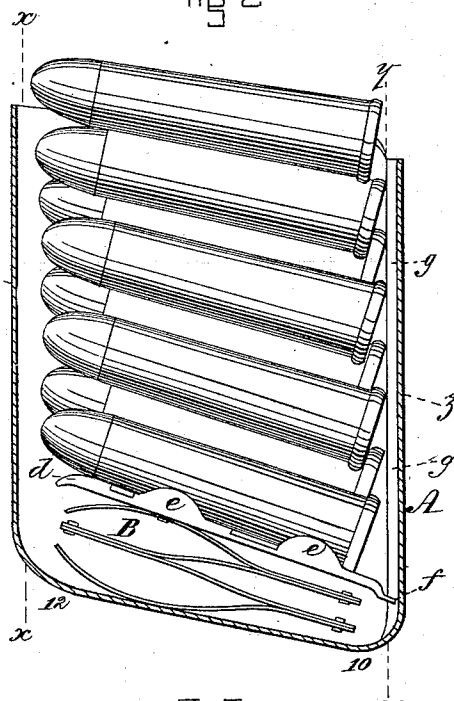


Fig 3

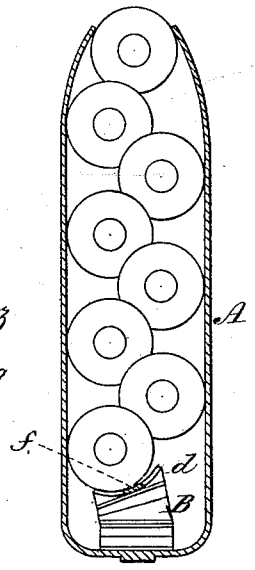


Fig 4

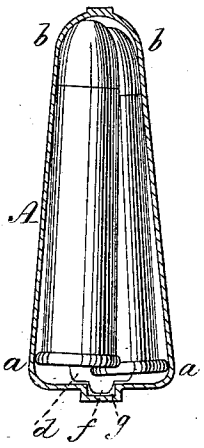


Fig 5

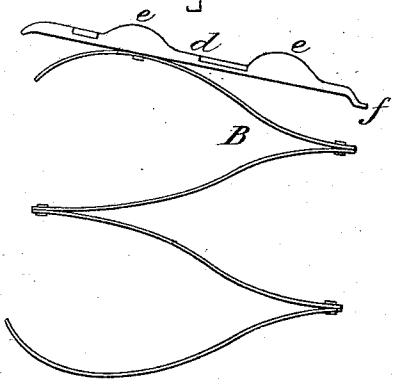


Fig 6

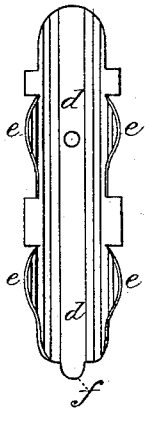
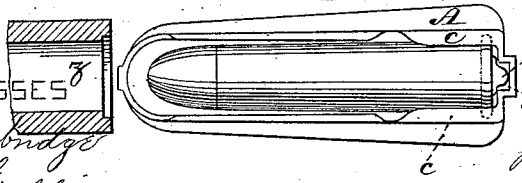


Fig 7



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UNITED STATES PATENT OFFICE.

HARRY A. LEWIS, OF BOSTON, MASSACHUSETTS.

CARTRIDGE-FEED CASE.

SPECIFICATION forming part of Letters Patent No. 283,122, dated August 14, 1883.

Application filed November 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, HARRY A. LEWIS, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Detachable Magazines or Cartridge-Holders for Breech-Loading Fire-Arms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a transverse vertical section through the front end of a detachable magazine constructed in accordance with my invention, taken on the line *x x* of Fig. 2. Fig. 2 is a longitudinal vertical section through the center of the same. Fig. 3 is a transverse vertical section through the rear end of the same on the line *y y* of Fig. 2. Fig. 4 is a horizontal section through the same on the line *z z* of Fig. 2. Fig. 5 is a side elevation of the spring-follower detached. Fig. 6 is a plan of the upper side of the spring-follower. Fig. 7 is a plan of the top or open end of the magazine.

My invention relates to certain improvements in detachable magazines or cartridge-holders, which are adapted for use in a gun or fire-arm, having a longitudinal slot or opening in the breech-piece immediately in the rear of the barrel. These magazines have heretofore been constructed to hold five cartridges placed therein sidewise, one upon another, as shown and described in the United States Letters Patent of James Lee, dated November 4, 1879, No. 221,328, the cartridges being pressed upward by a spring-follower at the bottom of the magazine. It has not, however, been found practicable to increase the capacity of the magazine by adding to its depth, as this would cause it to project out so far as to interfere with the convenient handling of the gun and render it clumsy.

My invention has for its object to render a magazine of this description capable of containing a greater number of cartridges without increasing its depth, and at the same time avoid any liability of the cartridges becoming wedged or jammed in such manner as to prevent them from being freely pushed forward by the spring-follower; and my invention consists in a detachable magazine or cartridge-holder of such width and shape as to admit of the cartridges being arranged or packed within it diagonally in two rows in such manner that they will roll upon each other and be delivered freely, without wedging, to the open tapered side or mouth of the magazine, which is contracted to such width as to allow of the escape of one cartridge only at a time; and my invention also consists in certain details of construction, as will be hereinafter set forth, and specifically claimed.

In the said drawings, A represents a detachable magazine or cartridge-holder, which is especially adapted to be attached to the under side of what is known as a "bolt-gun," in front of the trigger-guard, so as to deliver the cartridges therefrom through a longitudinal slot or opening formed in the breech-piece immediately in the rear of the barrel, the magazine being secured in place, after being introduced within this slot or opening, by means of any suitable catch or fastening device.

The magazine A is made, as usual, deeper at the rear end, 10, than at the front end, 12, for the purpose of allowing the cartridges to lie therein in an inclined position, and with their flanges overlapping one another, as seen in Figs. 2 and 3; but, instead of being made of such width as to admit a single vertical row or line of cartridges only, the magazine is constructed of such width and shape as to permit cartridges to be arranged or packed within it in two diagonal rows, as seen in Figs. 1 and 3, the magazine being tapered in the direction of its length from *a* to *b*, or from rear to front, as seen in Fig. 4, as is necessary to preserve the same diagonal positions of the two rows of cartridges with respect to each other throughout their entire length on account of the diminished diameter of the cartridges at the front or bullet ends. By this method of packing or arranging the cartridges diagonally in two rows, with the longitudinal axis of each cartridge of one row opposite to a point midway between the longitudinal axes of two contiguous cartridges of the other row, it will be seen that eight cartridges can be accommodated in a magazine of the same length as one heretofore adapted to contain five cartridges only, while the slight increase of width of the slot

or opening in the breech-piece of the gun, necessary to accommodate the above-described magazine containing the two rows of cartridges, will not render it necessary to make the breech-piece of the gun of any greater width or thickness than before, and consequently not in any wise more clumsy.

The upper or open end of the magazine, through which the cartridges are delivered, is made tapering or contracted in width, as seen in Figs. 1, 3, and 7, in order to allow but one cartridge at a time to pass out as they are pressed upward by the spring-follower B at the bottom of the magazine, and at the same time center the cartridge to the barrel, so as to be successfully moved forward by the plunger; and it will be seen that the diagonal arrangement of the two rows of cartridges causes them to roll freely upon each other as they are pressed upward by the spring-follower, and be delivered at the mouth or open end of the magazine without any liability of becoming wedged or jammed within the magazine, as would occur if they were arranged in two rows exactly opposite each other.

The magazine is provided at the top of its rear end with inwardly-projecting flanges *c*, Fig. 7, which serve to hold the cartridges in place at the rear end, and permit them to be pressed forward by the bolt of the gun into the chamber at the rear end of the barrel at the required times; but as these flanges form no part of my invention they will not be further described.

The spring-follower B is composed, as usual, of a number of leaves or flat pieces of steel, a plate, *d*, of concavo-convex form in cross-section, being secured to the upper leaf. This plate *d* is provided on each side with one or more upwardly-projecting lips or flanges, *e*, which prevent the plate *d* from slipping off the rounded surface of the cartridge in contact therewith and becoming jammed or wedged between the cartridges, as might otherwise occur, and which would thus render the follower inoperative and cause serious inconvenience and delay.

At the rear end of the plate *d* is a projection, *f*, which is adapted to fit into a vertical groove, *g*, in the interior of the rear end of the magazine, and serves to maintain the spring-follower B in a straight vertical line and prevent it from being forced to one side or getting otherwise displaced and rendered inoperative.

A number of the above-described magazines are intended to be carried by the soldier and attached to the gun, one after another, as required, and, although intended particularly for small-arms, may nevertheless be applied with advantage to battery or machine guns on account of its increased capacity, in which case the magazine would be inverted to bring its mouth at the bottom instead of at the top, as when used for small-arms.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A detachable magazine or cartridge-holder having a spring-follower, B, and made tapering in the direction of its length from *a* to *b*, and of such width and shape as to allow of the cartridges being packed within it diagonally in two rows, with the longitudinal axis of each cartridge of one vertical row opposite to a point midway between the longitudinal axes of two contiguous cartridges of the other vertical row, to roll upon each other, as set forth, and having its open end tapered or contracted to allow of the passage or delivery of one cartridge only at a time and center it to the axis of the barrel, all constructed and arranged to operate substantially in the manner and for the purpose described.

2. In a detachable magazine adapted to contain two rows of cartridges arranged diagonally, as set forth, the spring-follower B, provided with a plate, *d*, having on each side one or more upwardly-projecting lips or flanges, *e*, to prevent the plate from slipping off the rounded surface of the cartridge in contact therewith, substantially as described.

Witness my hand this 14th day of November, A. D. 1882.

HARRY A. LEWIS.

In presence of—
P. E. TESCHEMACHER,
W. J. CAMBRIDGE.