

(Model.)

L. P. DISS.
MAGAZINE FOR FIRE ARMS.

No. 303,992.

Patented Aug. 26, 1884.

Fig. 1.

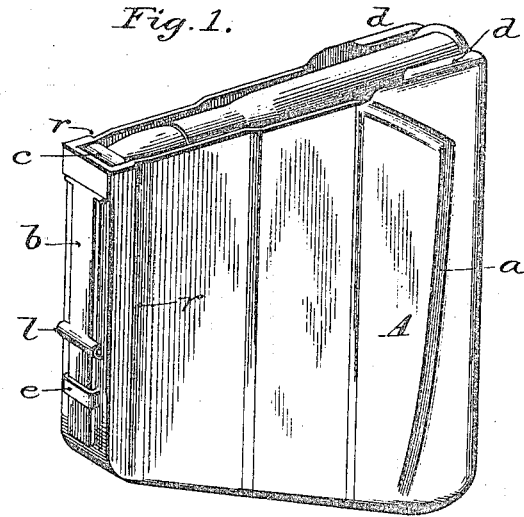


Fig. 2.

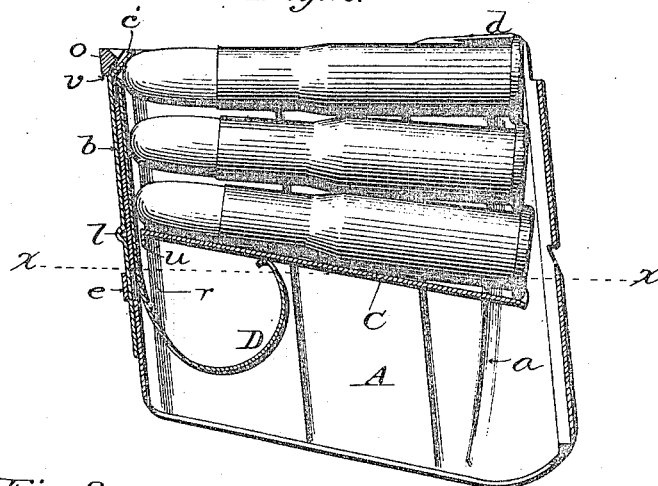


Fig. 3.

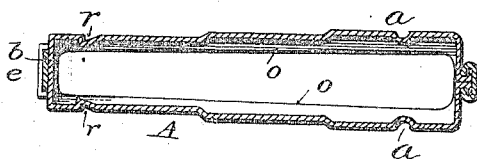
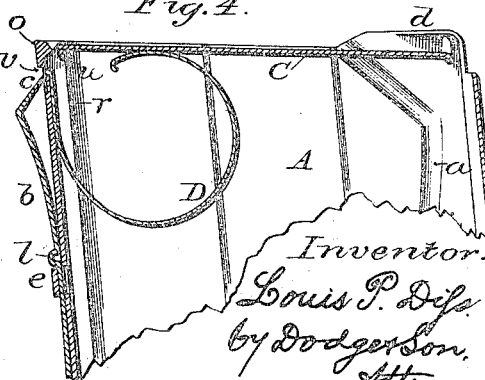


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

LOUIS P. DISS, OF ILION, NEW YORK, ASSIGNOR TO E. REMINGTON & SONS,
OF SAME PLACE.

MAGAZINE FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 303,992, dated August 26, 1884.

Application filed June 4, 1884. (Model.)

To all whom it may concern:

Be it known that I, LOUIS P. DISS, of Ilion, in the county of Herkimer and State of New York, have invented certain new and useful
5 Improvements in Magazines for Fire-Arms, of which the following is a specification.

This invention relates to detachable magazines for fire-arms; and the invention consists in the arrangement of a single curved spring
10 for feeding the cartridges from the magazine into the shoe of the gun, and in a novel arrangement of the detent for retaining the cartridges in the magazine, and in certain combinations of devices, as hereinafter more fully
15 set forth.

Figure 1 is a perspective view; Fig. 2, a longitudinal vertical section; Fig. 3, a transverse section on the line *xx* of Fig. 2. Fig. 4
20 is a longitudinal vertical section of a portion of the magazine.

In constructing my improved magazine I make the box or body *A* as usual, and preferably with internal vertical ribs or guides, *a*
25 and *r*, as shown, with a follower, *C*, having ears or projections to operate in connection with said guides, as described in a previous application pending herewith. It has also the
30 usual lips, *d*, at the rear end, to hold the heads of the cartridges from rising beyond a certain point, and it may be made with its bottom open or closed, as may be preferred; but if
open it should have an inturned flange, *o*, along each side of the bottom, as shown in Fig. 4.

Instead of the zigzag spring heretofore generally used, I use a single flat spring, curved,
35 as shown in Fig. 4. This spring is secured to the end wall of the box, preferably the front wall, in any suitable manner, by one of its ends, while its other end is left free to bear
40 against the under side of the follower, as shown in Figs. 2 and 4. In this case I have shown the end of the spring as being fastened to the box by inserting it through a transverse slit cut in the end wall near its top, and bend-
45 ing the end down and pressing it snugly down against the outside, as shown in Fig. 2. It is so secured in this case because of the fact that the detent *b* has its end *c* passing through said slit, and the spring cannot pass up in front of

said end *c* of the detent, as it would interfere 50 with its operation. It is, however, obvious that it might be secured by a rivet to the wall of the box below the slit, or in those cases where the detent is not used, or is located at some other point. The end of the spring 55 might be hooked over the top edge of the box, and be secured there in the same manner. The free end of the spring *D* is bent or curved, as shown, at its free end to form a rounded surface at the point of contact with the follower 60 *C* when pressed down, as shown in Fig. 2, so as to permit of a free action and prevent the end of the spring from catching on the follower, as it might otherwise do. The spring 65 *C* is so curved as to raise the follower to the extreme top or mouth of the box, and is made to bear against the follower nearest its front end, as shown in Figs. 2 and 4, whereby it insures the keeping of the front end of the cartridges elevated, as is necessary in this style 70 of magazines. This style of spring may be used in all magazines of this class, but is preferably used in those which have the guides or vertical ribs *r* and *a* on their sides and have the follower *C* provided with ears or projections 75 operating in connection with said ribs, as described in my previous application, as by those means the follower is held in position, and is prevented from tipping up and becoming displaced. 80

To retain the cartridges in the box when detached from the arm, I make use of a sliding spring-detent originally invented by Roswell F. Cook, but apply it differently. This 85 detent is shown in each of the figures, and it consists of a flat strip of metal, preferably of steel or equivalent spring metal, as indicated by *b* in the several figures. Its upper end, *e*, is bent so as to incline inward, as shown clearly in Figs. 2 and 4, and it has a shoulder or pro- 90 jection, *l*, formed on its body at the proper point to be brought in contact with the stock or frame of the arm, or with some projection thereon, for the purpose of automatically moving it as the box is shoved into place when 95 applied to the gun, and thereby release the cartridges. The upper inclined end, *e*, of this detent *b* is inserted through a transverse slot

cut in the front wall of the box near its top, as shown in Figs. 1 and 2, while its lower end is inserted through a loop, *e*, which is formed by cutting a couple of transverse slits in the wall of the box and stamping the metal between the slits outward, as shown more clearly in Fig. 1. When the detent is pushed downward, its point *e* is drawn out of the slot, and its extreme upper end or point will rest against the outer face of the box, as shown in Fig. 4, when the cartridges can be inserted by pushing their heads in under the lips *d* at the rear end and holding their front ends down until the box is filled, and then by sliding the detent *b* upward its inclined end *e* will pass through the slot and engage over the point of the uppermost cartridge, as shown in Fig. 2, thereby fastening the cartridges securely in the box. In order to prevent the inclined end of the detent from being straightened out by pressure or accidentally in any way, I fill in the angle or front corner of the box above the slot through which the inclined portion of the detent slides by a solid beveled piece, *o*, as shown in Figs. 2 and 4. This not only forms a support for the inclined end *e* of the detent, but it also serves as a guide for the end of the detent as it is shoved in. Instead of making this piece or part *o* to extend across the entire front wall, it may be made in the form of a small shoulder or ledge located in each corner and answer the same purpose, these shoulders of course being similarly inclined. By thus providing a support and guide for the inclined end of the detent, I am also enabled to make the latter thinner and more elastic, and this enables it to be more easily moved and to operate in a very perfect and satisfactory manner. By locating the detent at the front end of the box, instead of at the side, I avoid the necessity of cutting away the stock and metal of the frame as much as would otherwise be necessary, and thus to that extent avoid weakening the gun at that point; and this is an important consideration in a gun of that class or style with which these detachable magazines

are to be used, because of the extent to which they have to be cut away to receive the magazine. Besides, it makes a most effectual lock for retaining the cartridges, as it engages with their extreme front end, while their rear end is held firmly by the rigid lips *d* at the rear end of the box.

A magazine constructed, as herein described, with a single spring, and with a follower provided with the means for guiding and controlling its movements, and with the elastic detent guided and supported as described, operates in most satisfactory manner.

Having thus described my invention, what I claim is—

1. In combination with a cartridge box or magazine substantially such as described, the single curved spring *D*, having one end secured to the box at or near its top, with its other or free end arranged to bear against the follower midway between its ends, substantially as shown and described.

2. In combination with the detachable magazine or box *A*, provided with the internal ribs, *a* and *r*, the follower *C*, provided with laterally-projecting ears at its front and rear ends, and the coiled spring *D*, having one end secured to the top of the box and its opposite end left free to operate on the follower, all being constructed and arranged to operate substantially as shown and described.

3. The sliding detent *b*, applied at the front end of the box, and having its upper inclined end arranged to work through a slot, *v*, in said front wall of the box, substantially as shown and described.

4. The magazine or box *A*, provided with a slot, *v*, for the end of the detent to pass through, and having the inclined support or guide *o*, arranged within the box above said slot, in combination with a sliding detent, arranged to operate substantially as described.

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Witnesses:

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