(No Model.)

2 Sheets—Sheet 1.

S. K. HINDLEY.

MAGAZINE FOR FIRE ARMS.

No. 384,161. Patented June 5, 1888.

Fig. 1.

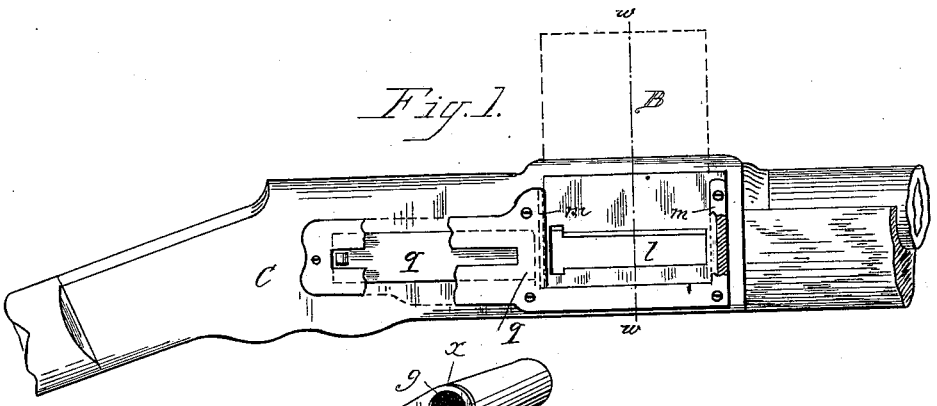


Fig. 2.

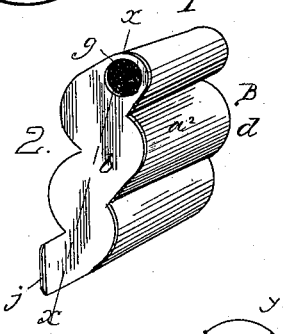


Fig. 3.

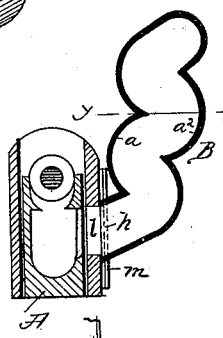


Fig. 4.

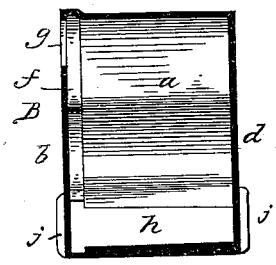


Fig. 5.

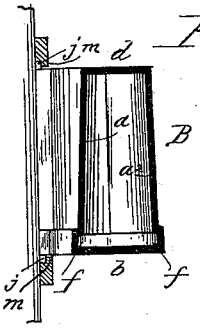
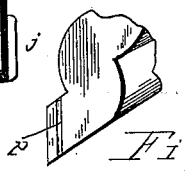


Fig. 6.



Witnesses.

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 7.

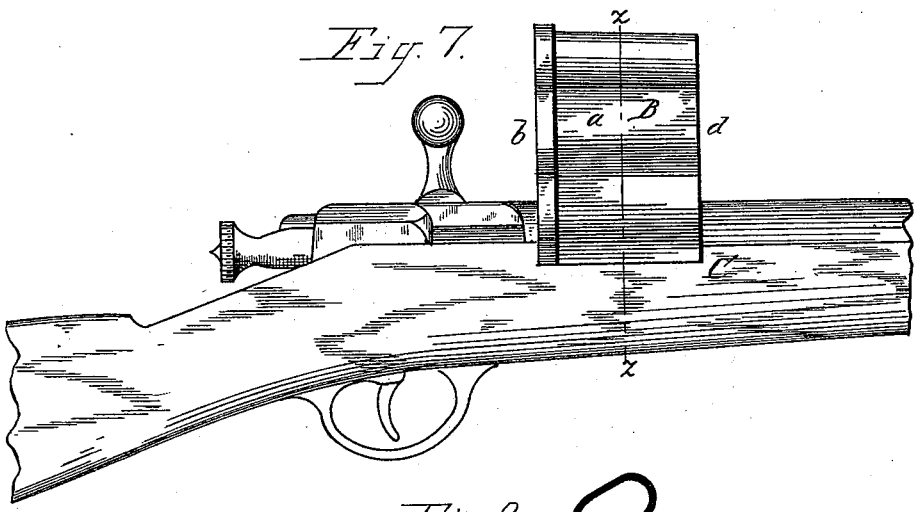


Fig. 8.

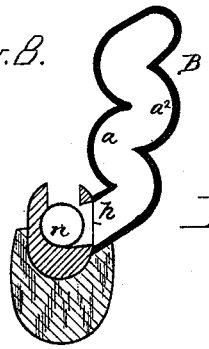


Fig. 9.

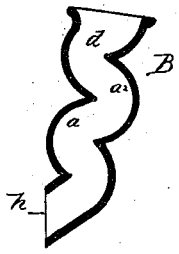
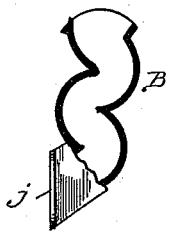


Fig. 10.



Witnesses.

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UNITED STATES PATENT OFFICE.

SOLOMON K. HINDLEY, OF SPRINGFIELD, MASSACHUSETTS.

MAGAZINE FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 384,161, dated June 5, 1888.

Application filed February 23, 1888. Serial No. 265,046. (No model.)

To all whom it may concern:

Be it known that I, SOLOMON K. HINDLEY, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Magazines for Fire-Arms, of which the following is a specification.

This invention particularly relates to a cartridge-magazine applicable to that class of fire-arms in which the frame or stock of the arm at the rear of the barrel is provided with an aperture capable of the reception of a cartridge, and from which aperture the said cartridge may be transferred or projected into the said barrel-bore, and is most particularly designed for use in connection with breech-loading fire-arms in which a breech piece or pin is arranged at the rear of the barrel and in an axial line therewith, and so as to be moved backward to open and forward to close the breech, said breech-pin moving into and through the said cartridge-aperture, carrying the cartridge lying therein into the barrel in the latter instance and back and away from the said cartridge-space in the former instance, then leaving said cartridge space free for the reception therein of another cartridge to be conveyed thereto, either directly from the magazine or indirectly therefrom, under the action of an interposed cartridge-carrier between said magazine and said axially-disposed cartridge-space; and the said invention consists in certain features of construction and combination of parts, as will hereinafter more fully appear, and be specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, in which the present invention is illustrated, and in which similar letters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of a portion of a breech-loading fire-arm embracing the features of breech construction found in the well-known "Bullard system," and showing an adaptation thereof for the reception thereupon of the magazine of the present invention, the position of the latter upon the said fire-arm being indicated in dotted lines; and Fig. 2 is a perspective view of the magazine. Fig. 3 is a cross-section of the fire-arm shown in Fig. 1 and of the magazine applied thereupon on line *w w*, Fig. 1. Fig. 4 is a vertical longitudinal section of the magazine on line *x x*, Fig. 2. Fig. 5 is a horizontal section on line *y y*, Fig. 3. Fig. 6 is a view of a slight modification in construction, to be hereinafter referred to. Fig. 7 is a side elevation of a portion of a breech-loading fire-arm embracing the features of breech construction well known as the "Bolt system," also showing the magazine of the present invention as applied thereto. Fig. 8 is a cross-section of Fig. 7 on line *z z*, Fig. 7. Figs. 9 and 10 are cross-sectional views of magazines of the present invention when formed under slightly-modified construction.

In the Bullard system of fire-arms, as well known and as heretofore practiced, a carrier-block, as shown at A, is employed in the stock or frame at the rear of the barrel, having a body transversely concave or recessed, which portion thereof normally lies in a plane below that of the barrel and coincident with the bore of a longitudinally-arranged and forwardly-extending tubular magazine, which is disposed in the fore-arm along and beneath the barrel, and from which longitudinally-arranged magazine, cartridges are successively projected onto said carrier-block, which block is then, under the action of the operating parts, carried upwardly to present the cartridge in the axial line of the barrel, when the reciprocating breech-pin is moved forward and carries the cartridge into the barrel.

In the Bolt system of fire-arms, as well known, the breech at the rear of the barrel is provided with an aperture or cartridge-receiving space in the axial line of the barrel, through which a reciprocating bolt or plunger plays for the introduction of the cartridge into the barrel and the closing of the breech; and in the use of the magazine of the present invention, in connection with a fire-arm similar to the Bullard gun described, the magazine is applied thereto in a manner to guide and discharge cartridges therein contained to the said carrier-block when in its normal position, and when the magazine is used in connection with a Bolt gun it is applied thereupon so as to discharge cartridges therefrom to the cartridge-receiving space of said gun in line with the barrel.

As to the magazine, the same consists, essentially, of a box, B, having a width substantially corresponding with the diameter of a

cartridge to be used in the fire-arm upon which said magazine is to be employed and of a length corresponding with that of such cartridge, the two opposite internal side walls, *a* a^2, being corrugated substantially as shown, whereby a sinuous or more or less zigzag passage of substantially uniform width is formed from end to end of the magazine, and the said chamber tapers a little from its rear end, *b*, to its forward end, *d*, to correspond with the taper of the cartridges, and said inner side walls are also at their rear ends provided with grooves, as *f f*, to accommodate the rear flanges or rims of the cartridges. The said magazine-box, as shown in the drawings, Figs. 2 and 4, has a circular aperture, *g*, formed in the upper end of its rear wall for the introduction of cartridges endwise therein, and at the lower end of the inner side wall *a* a longitudinal opening, *h*, is formed of a size sufficient for the rolling or passage bodily therethrough of the cartridges one at a time. The said box is also provided with lips or flanges *j j*, projecting outwardly from the lower part of its opposite end walls in a plane coincident with that of the lower part of the side wall *a* of the magazine.

As seen in Figs. 1 and 3, the side of the frame C of the gun there shown is provided with a longitudinal aperture, *l*, similar in form to that of the discharge-opening *h* in the magazine, and the outer side of said frame is provided with vertical overlying lips *m m* to form guides and retaining means in the attachment of the magazine in place upon the side of the gun-frame, and under the application of the magazine described to the gun set forth as in accordance with the Bullard system the longitudinal magazine-chambered construction of the fore-arm of the gun under the barrel may be dispensed with, and the said fore-arm made much lighter and cheaper, and in the present construction the cartridges entered into the magazine are discharged to and upon the carrier-block, which under well-known mechanism is elevated to place the cartridge in the line of the reciprocating breech-pin for its being thereby entered into the barrel. A slide, *q*, is arranged to be moved over the opening *l* in the frame, Fig. 1, when the magazine is not attached thereto. As seen in Figs. 7 and 8, the magazine is applied in relation to a Bolt gun, so as to discharge its contained cartridges one at a time in the cartridge-space *n* at the rear of and in the axial line of the barrel, and is thence entered into the barrel by the forward movement of the bolt or breech-pin.

The present improved cartridge-magazine is to be formed of any desired material—as, for instance, sheet brass or iron, stiff paper, or papier-maché—and may also, in lieu of having the cartridge-receiving opening at and through one end wall, as described, for some purposes have such opening formed in its upper side and for its entire length, as seen in Figs. 9 and 10, whereby the cartridges are dropped bodily therein instead of being pushed endwise, although the former described construction, obviously, is preferable, as then in any position or movement of the fire-arm the cartridges will be prevented from escape, and in practice it is intended that the magazine shall be of such a height as to have a capacity for containing six or seven cartridges, although it may, if desired, be more elongated, securing greater capacity, or it may be made of decreased length and provided with less bends or corrugations, as seen in Fig. 10, such magazines of decreased capacity being in some instances sufficient for all practical purposes, and instead of forming projections or lips *j* upon the magazine, as described, grooves, as shown at *p*, Fig. 6, may be provided in the end walls of the box near the inner face thereof, into which correspondingly-formed ribs or lips of the gun-frame may enter, the grooved construction of the box being in substance the equivalent of the lip formation thereof, but clearly preferable thereto when the magazine is to be formed of such material as paper.

This magazine-box formed as described may be employed as a permanent fixture or a removable attachment to a fire-arm, and may serve as the cartridge-inclosing box, into which the cartridges are packed at the place of manufacture, serving the purposes of sale and transportation, packages being of convenient form for handling, and at the same time capable of ready attachment to the gun as the magazine, and when the supply is exhausted they may be discarded and another and filled cartridge case and magazine be brought into use, it being understood that after the filling of said magazines, as described, at their places of manufacture, or of the manufacture of the cartridges, the said discharge-opening *h*, as also the entering-opening, if desired, is to be closed by a covering of suitable material—such as paper, &c.—to be pasted or otherwise secured over such opening or openings.

What I claim as my invention is—

1. A magazine for fire-arms, consisting of a box having its two opposite side walls internally corrugated, and having in one end wall an opening through which to insert cartridges, and also having in its inner side wall a discharge-opening, and means whereby the said magazine may be attached to the side of a gun-frame, substantially as and for the purpose described.

2. A magazine for fire-arms, consisting of a box having its two opposite sides internally corrugated and provided near one end wall with the grooves *f f*, and provided with a rear end opening, through which to insert cartridges, and a discharge-opening, and means whereby the said magazine may be attached to a gun-frame, substantially as and for the purpose described.

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G. M. CHAMBERLAIN.