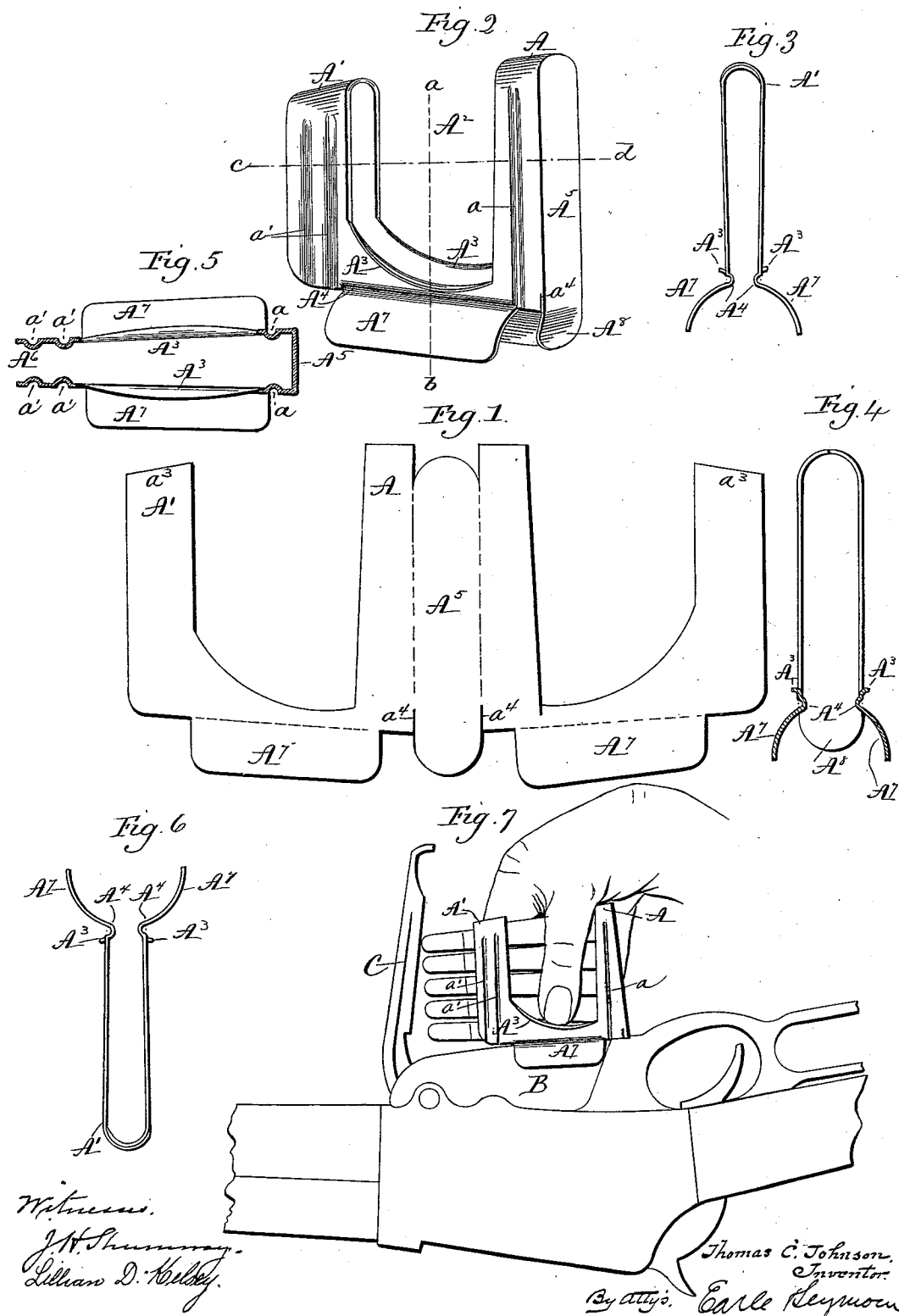


T. C. JOHNSON.
TEMPORARY CARTRIDGE HOLDER.

Patented Mar. 16, 1897.



UNITED STATES PATENT OFFICE.

THOMAS C. JOHNSON, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE
WINCHESTER REPEATING ARMS COMPANY, OF SAME PLACE.

TEMPORARY CARTRIDGE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 578,931, dated March 16, 1897.

Application filed September 23, 1896. Serial No. 606,757. (No model.)

To all whom it may concern:

Be it known that I, THOMAS C. JOHNSON, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Temporary Cartridge-Holders; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification and represent, in—

Figure 1, a plan view of such a blank as may be used in forming my improved temporary cartridge-holders; Fig. 2, a perspective view of a completed holder; Fig. 3, a view in front elevation of the forward end of the holder; Fig. 4, a view in vertical section on the line *a b* of Fig. 2, looking rearward; Fig. 5, a view in horizontal section on the line *c d* of Fig. 2; Fig. 6, a view in front elevation of the forward end of the holder, showing the holder in position for being charged; Fig. 7, a view showing the application of the holder to the magazine of a bottom-loading box-magazine firearm which is reversed in position for being loaded.

My invention relates to an improvement in temporary cartridge-holders which are employed in charging the magazines of box-magazine firearms with cartridges, the object being to produce at a low cost for manufacture an extremely simple and light article, constructed with particular reference to securing economy of space not only in the boxes in which it is initially packed for transportation, but also in the belt in which it is stowed by the user preparatory to use, and, furthermore, with particular reference to being quickly and conveniently handled by the user in extracting it from his belt and applying it to his arm and expelling its contained cartridges into the box-magazine thereof.

With these ends in view my invention consists in a temporary cartridge-holder having a transversely-arranged finger-passage extending nearly to its open inner edge or bottom to permit the expulsion of the last cartridge by the fingers alone, the said holder being made elastic for the normal retention of the cartridges.

My invention further consists in a temporary cartridge-holder having a transversely-arranged finger-passage extending nearly to its open inner edge or bottom to permit the expulsion of the last cartridge by the fingers alone, having one or both of its side walls made elastic.

My invention further consists in a temporary cartridge-holder having a transversely-arranged finger-passage extending nearly to its open inner edge or bottom to permit the expulsion of the last cartridge by the fingers alone, and provided at a point directly below the said passage with one or more cartridge-retaining ribs, and the said holder being made elastic for the normal retention of the cartridges.

My invention further consists in a temporary cartridge-holder having a transversely-arranged finger-passage extending nearly to its open lower edge or bottom to permit the expulsion of the last cartridge by the fingers alone, and having one or more locating-flanges, and the said holder being made elastic for the normal retention of the cartridges.

My invention further consists in a temporary cartridge-holder having a transversely-arranged finger-passage extending nearly to its open inner edge or bottom to permit the expulsion of the last cartridge by the fingers alone, and constructed from a single piece of sheet metal, and the said holder being made elastic for the normal retention of the cartridges.

My invention further consists in certain details of construction and combinations of parts, as will hereinafter described, and pointed out in the claims.

In carrying out my invention, as herein shown, I form my improved holder by bending and shaping such a sheet-metal blank as is illustrated by Fig. 1 of the drawings, to which, for convenience, I shall appropriately apply the letters hereinafter employed to designate the several features of the finished holder. As at present advised, I prefer to form my improved holder from a single piece of sheet metal, as I thereby secure simplicity, lightness, and the practical avoidance of joints, but I do not limit myself to forming the holder from a single piece of sheet metal

by folding a suitable blank, for, if preferred, I may form the holder by drawing and cutting a suitable blank, or I may form it in sections in a great variety of ways, which it seems unnecessary to illustrate.

As herein shown, my improved holder is U-shaped in transverse section and tapers both in side and end elevation, or in width and thickness from its rear to its forward end.

Its body portion is virtually divided into a rear member A and a forward member A' by means of a wide and deep transversely-arranged finger-passage A², intersecting its closed upper edge or top and extending very nearly to its open inner edge or bottom, the said passage having virtually straight side walls and a curved bottom wall. I have chosen to call this passage a "finger-passage" because it is provided for permitting the use of the fingers in expelling the cartridges from the holder even to the last cartridge which is expelled by the fingers to the exclusion of any special expelling device applied to the holder, as, for instance, in the temporary cartridge-holder shown and described in United States Patent No. 547,986, granted October 15, 1895, on the application of John M. Browning. It is designed that the passage-way shall extend just as nearly to the open inner edge or bottom of the body portion of the holder as it is feasible to make it, so that the expulsion of the last cartridge can be more conveniently and surely effected. The lower walls of the said finger-passage are turned outward to form guard-flanges A³ A³, which prevent the fingers from being cut or scraped and which also very materially stiffen the holder. Just below the said flanges the holder is formed with two inwardly-projecting cartridge-retaining ribs A⁴, on which the lowermost cartridge in the holder has a long bearing and which assist in expelling the cartridges as soon as the centers thereof pass below them. The holder shown is furnished with two of these ribs, though one may suffice. As shown, also, they are formed by setting portions of the metal inwardly, but they might be formed in some other way, as, for instance, by applying suitable strips of wire or other material to the inner faces of the side walls of the body portion of the holder. In the holder shown both of the side walls of its body portion are made elastic, but it is sufficient to have one of them so made. The side walls of the rear member A of the holder are made parallel or substantially parallel with each other, as clearly shown in Fig. 4, but the side walls of the forward member A' of the body portion of the holder converge toward each other from their upper to their lower edges, as clearly shown in Fig. 3.

The rear end of the holder is closed by a plate-like wall A⁵, while the forward end of the holder is open, as at A⁶, for the projection through it of the bullets of the cartridges, the heads of which have more or less bearing upon the inner face of the rear

wall A⁵. It is the rear member A of the body portion of the holder, with its straight side walls, which facilitates the compact packing of the holders and their convenient extraction from the user's belt, in which they are alternately arranged with their closed rear ends uppermost, but with their upper and lower edges or tops and bottoms reversed.

The rear member A of the body portion of the holder is formed with two oppositely-located, inwardly-projecting, vertically-arranged ribs *a a*, formed by corrugating or grooving the metal, and having the twofold function of engaging with the heads of the cartridges for holding the same against forward displacement and of stiffening the holder and enabling the same to be made of lighter stock than could otherwise be employed.

The forward member A' of the body portion of the holder has each of its side walls constructed with two vertically-arranged, parallel, inwardly-projecting ribs *a' a'*, formed by corrugating or grooving the sheet metal, and stiffening the holder, as well as reducing the frictional engagement of the cartridges with the holder in their expulsion therefrom. The holder is also provided, as shown, with two integrally-formed, downwardly-extending, corresponding, transversely-bowed locating-flanges A⁷ A⁷, extending outward beyond the side walls of the body portion of the holder and merging at their inner ends into the cartridge-retaining ribs A⁴ A⁴ and located in line with the finger-passage A². I have called these flanges "locating-flanges" because their main function is to locate the holder upon the arm as to sidewise position, and to hold it in such location while the cartridges contained in it are being expelled into the box-magazine of the arm. These flanges may also assist in spreading the side walls of the holder, but the downward pressure of the fingers upon the cartridges is mainly relied upon to sufficiently separate its side walls for the expulsion of the cartridges. The plate A⁵ is extended at its lower end to form a locating-finger A⁸, which is designed to be engaged with the arm so as to locate the holder against endwise displacement during the expulsion of its cartridges.

If desired, the holder may be formed with only one of the locating-flanges A⁷, and the locating-finger A⁸ might be dispensed with, but I prefer to employ two locating-flanges and the locating-finger. The locating-flanges also have a hopper function when the holder is being charged with cartridges, at which time it is preferably turned into the inverted position in which it is shown in Fig. 6. When the holder is formed from a single piece of metal, and from such a blank as shown by Fig. 1, the portions *a³ a³* of the blank are overlapped, as clearly shown in Fig. 3, the double thickness of metal thus secured enhancing the spring action of the forward end of the holder. As herein shown,

also, the metal is cut, as at $a^4 a^4$, at the base of the rear end of the body portion for giving some slight elasticity to the side walls of the rear portion of the holder, but this is not necessary, and these cuts may be omitted.

My improved holder may be used in conjunction with both bottom-loading and top-loading box-magazine firearms and may require some special adaptations of form to different kinds of arms.

In Fig. 7 I have shown the manner of its use in conjunction with a bottom-loading box-magazine arm of the type in which the open bottom of the magazine B is normally closed by a swinging plate C, the arm being inverted in position for convenience of loading it.

It will be understood that in expelling the cartridges from the holder each cartridge is given a separate expelling impulse by the effort of the side walls of the holder to contract after the longitudinal center of the cartridge has passed below the cartridge-retaining ribs at the bottom of the holder, and this is also true of the last cartridge, which is snapped, so to speak, out of the holder as soon as the pressure of the finger upon its upper surface has pushed its longitudinal center below the said ribs, the extension of the finger-passage almost to the open lower edge of the holder permitting the last cartridge to be followed down by the finger and pressure maintained upon it until after its longitudinal center has passed below the said ribs. Preferably, therefore, the distance between the bottom of the finger-passage and the ribs should be a trifle less than half the diameter of the cartridges employed. I am enabled in the construction shown to carry the finger-passage downward thus far by the stiffening and reinforcing effect of the outwardly-turned guard-flanges and of the said ribs. These ribs also perform an important function in righting the cartridges, so to speak, in case they are tilted in the holder, and in causing them to be discharged into the box-magazine in a position practically parallel therewith, and in such a manner that their proper delivery thereinto is practically assured. This results in part from the fact that the cartridges have a longitudinal or linear engagement with the ribs by which they are supported for a sufficient distance throughout their length to prevent them from being tilted, and from which they are released as quickly at one point as at another. I might further call attention to the fact that the ribs are located in line with the taper or inclination of the

lower edge of the holder. When the holder is full, the lowermost cartridge is supported throughout its middle portion on each side by the two ribs, which are then parallel with the longitudinal axis of the lowermost cartridge.

In view of the changes suggested in the foregoing and of other changes which may obviously be made I would have it understood that I do not limit myself to the exact construction herein shown, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A temporary cartridge-holder having a transversely-arranged finger-passage intersecting its closed outer edge, and extending nearly to its open inner edge, and having outwardly-turned guard-flanges located at its inner end for protecting the fingers and stiffening the holder.

2. A temporary cartridge-holder having a transversely-arranged finger-passage and a locating-finger extending inward, and adapted to engage with the firearm to hold the holder against endwise displacement.

3. A temporary cartridge-holder having a transversely-arranged finger-passage intersecting its closed outer edge, and extending nearly to its open inner edge, guard-flanges located at the inner end of the said passage, two locating-flanges located at the inner edges of the side walls of the holder, and a locating-finger situated at the rear end of the holder which is closed.

4. A temporary cartridge-holder made from a single piece of sheet metal U-shaped in cross-section, tapering in width and thickness from its forward to its rear end, having its rear end closed and its forward end open, constructed with a transversely-arranged finger-passage, and provided with guard and locating flanges and a locating-finger, and formed with one or more cartridge-retaining ribs, and with a plurality of vertically-arranged corrugations.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

THOMAS C. JOHNSON.

Witnesses:

GEORGE D. SEYMOUR,
LILLIAN D. KELSEY.