NEWCOMB & LYON.

Cartridge Box.

No. 71,633. Patented Dec. 3, 1867.

Fig. 8

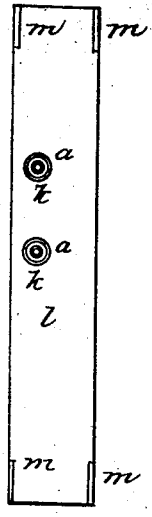


Fig. 1

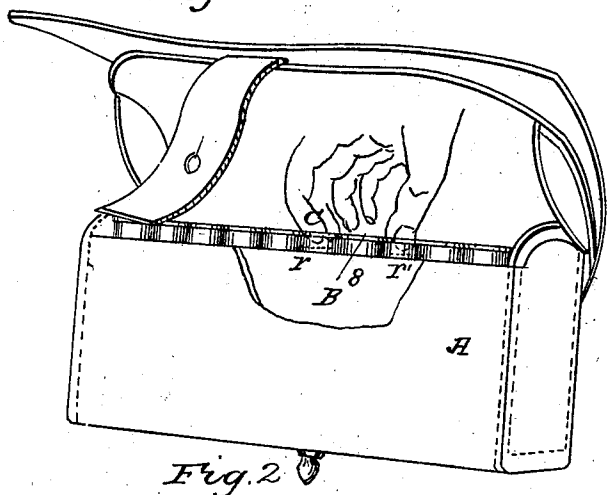


Fig. 2

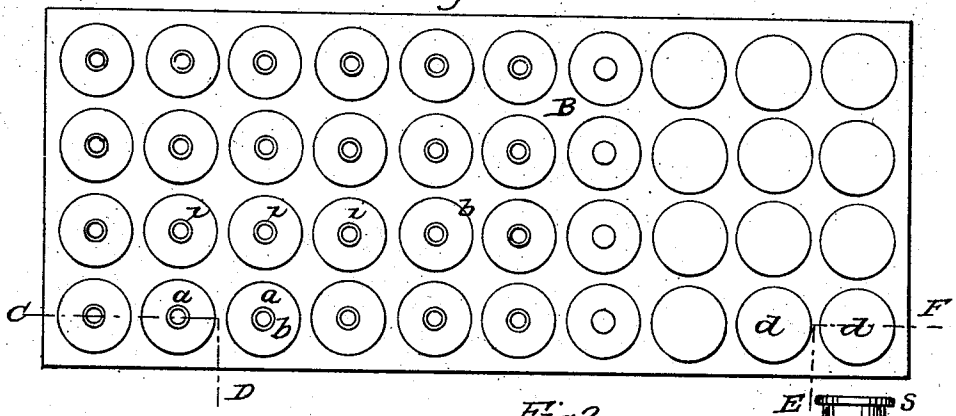
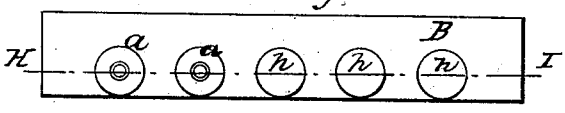
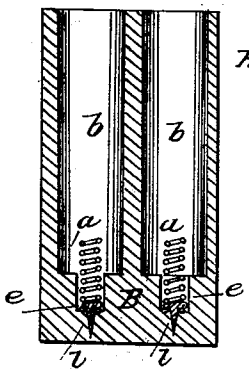


Fig. 2





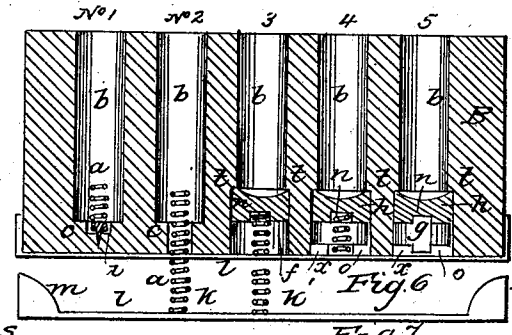


Fig. 6

Fig. 7

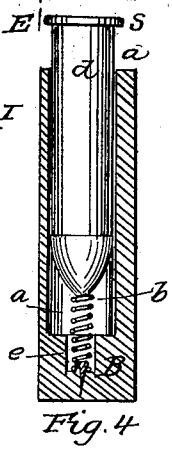


Fig. 4

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ALBERT C. NEWCOMB AND BENJAMIN LYON, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNORS TO THEMSELVES AND SAMUEL W. PORTER, OF THE SAME PLACE.

Letters Patent No. 71,633, *dated December* 3, 1867.

IMPROVEMENT IN CARTRIDGE-BOXES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, ALBERT C. NEWCOMB and BENJAMIN LYON, both of Springfield, in the county of Hampden, and Commonwealth of Massachusetts, have invented a new and useful Improvement in Cartridge-Boxes; and we do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a perspective view of our improved cartridge-box.

Figure 2 is a plan of a full-sized block or cartridge-holder, removed from the cartridge-box.

Figure 3 is a vertical section through line C D of fig. 2.

Figure 4 is a vertical section through line E F, fig. 2, showing a cartridge in place.

Figure 5 is a plan view, showing different modifications of our invention.

Figure 6 is a vertical section through line H I of fig. 5, showing details of construction of said modifications.

Figure 7 is a side view of the movable bottom *l* of a box, and

Figure 8 is a plan view of said bottom.

The nature of our invention consists in constructing a cartridge-box in such a manner that the cartridge, when placed in its chamber or receptacle in the cartridge-box, shall rest upon an elastic bed or support, so that the flange and head of the cartridge shall be elevated above the top of the block which contains the cartridges sufficiently to be easily and quickly seized and drawn out when required for use, said elastic support also serving to preserve the cartridge from injury during transportation in the box.

It is well known that, as cartridge-boxes are now constructed, more or less difficulty is experienced by the soldier in withdrawing the cartridges from the box, especially when in haste, and the difficulty is increased if his hands are benumbed with cold. Our invention entirely obviates this difficulty, as, if the fingers, somewhat spread apart, be pressed down slightly upon the cartridges when the latter are in place in the chambers of the cartridge-box, and the fingers then brought together, they are sure to grasp some one of the cartridges not pressed down.

The construction of our invention is as follows: In the drawings, B represents the block or holder, in which are formed the cylindrical chambers *b b*, made of sufficient diameter and depth to receive a cartridge. At the bottom of this chamber *b* a smaller hole, *c*, is made as a socket for the spiral spring *a*, the end of the spring being set down in this socket in an upright position, while a portion of the spring projects upward into the chamber *b*. A tack, *i*, having a head sufficiently large, is driven down through the interior of the spiral spring *a* into the wood, thus holding the spring firmly in place. The spring projects into the chamber *b* sufficiently to elevate the flange *s* of the cartridge *d* a short distance above the upper surface *u* of the block B, as shown in fig. 4, so that the head of the cartridge *d* may be readily and firmly grasped in the operation of removing it from the box. Fig. 6 shows the details of construction of different modifications of our invention, in which No. 1 is the same as has been above described. No. 2 has the hole *c* made in the bottom of the block B, communicating with the chamber *b*, in which case a movable bottom, *l*, is attached to the block B, and kept in place by the ears *m m*, or by any other suitable means, and the spring *a* is attached to the movable bottom *l* at *k*, in such position that when the bottom *l* is attached to the block B, the spring *a* extends up through the hole *c* into the chamber *b*. In No. 3, fig. 6, the chamber *f* extends from the bottom of the block B up to the point *t*, and is of larger diameter than the chamber *b*, and into this chamber *f* is inserted, through its bottom, the piece *h*, which is also of larger diameter than the chamber *b*, and of such size and form as to move freely vertically in the chamber *f*. The small cavity *n* is made in the bottom of the piece *h* to receive the upper end of the spring *a*, said spring *a* being attached to the movable bottom *l* at *k'*. No. 4 represents a modification similar in form and construction to that of No. 3, except that a circular piece, *x*, made to fit the chamber *f* tightly, and having the cavity *o* in the top for the insertion of one end of the spring *a*, is inserted in the lower part of said chamber *f* and fastened in securely, the lower end of the spring *a* resting in the cavity *o*, and the upper end of said spring *a* being inserted in the cavity *n*, said cavities *n o* serving to keep the spring *a* in its proper vertical position. This circular piece *x* may also represent a separate bottom attached, as the chamber *f* could be made under all the chambers *b b*, in a block, and after inserting all the pieces *h* and springs *a a*, a bottom, of the

thickness *x*, could be glued or secured to the bottom of the block B. We prefer, however, the method of construction shown in No. 1 of fig. 6, as being cheap, durable, and practical. No. 5 of fig. 6 represents a modification similar in construction to that of No. 4, but with a spring, *g*, made of rubber or caoutchouc, substituted for the metallic spiral spring *a*. We prefer, however, the metallic spring *a*, as more durable and elastic.

The operation of our invention is as follows: When it is desired to remove a cartridge from the box, the thumb and fingers are spread, as shown in red in fig. 1, and pressed down upon the heads of the cartridges, so that the cartridges are depressed into their chambers, their flanges, 6 and 7, coming in contact with the top of the block B, as shown at *r r'*. If the thumb and fingers be now brought together, some one of the cartridges which are remaining elevated above the surface of the block B, between the thumb and fingers, as 8, will be grasped, and can easily and quickly be removed from their chambers.

The block B may be made of pressed paper, metal, or of any other suitable material, that being of no consequence as regards the application of our invention to said block B. The cavity in the bottom of the chamber *b*, for the reception of the bottom of the spring *a*, might be omitted in the construction of the cartridge-box, as the said spring *a* might rest upon and be secured to the bottom of the chamber *b* by the nail *i*, but we prefer to use the cavity *e*, as it greatly assists in keeping the spring *a* in an upright or vertical position.

It is evident that any form or kind of spring may be used, and that it may be attached by many different methods, as may suit the taste, any and all of which we consider as equivalent to each other, and to the methods we have shown, the object of our invention being to provide the bottom of the chamber *b* with a suitable elastic support for the cartridge while in its place in its chamber *b*. If the cartridge rests upon the solid bottom of a chamber, there is danger of explosion in a metallic cartridge—there being fulminates in the heads of such cartridges—if the cartridge-box or the cartridges were struck upon the top by accident. If by oversight any ball were not properly secured to its shell, any violent concussion or jar might entirely loosen and remove the ball and powder from the shell. All of the above difficulties and objections are removed by our invention, as the cartridges rest upon an elastic bed or support, and they cannot receive the full force of any concussion.

It is evident that our invention is equally applicable in the construction of cartridge-boxes to contain cartridges made of paper, or of any other suitable material, as those made of metal.

We are aware that devices have been used to render the removal of cartridges from their chambers free of difficulty, but never, to our knowledge, has an elastic support in the cartridge-chamber of the box been constructed or used for that purpose.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A cartridge-box, having an elastic bed or support in the bottom of the chamber *b*, upon which the cartridge may rest while in place, substantially as herein described and for the purposes specified.

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BENJAMIN LYON.

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M. E. BROWN.