G. L. BAILEY.

Implement for Capping and Uncapping Cartridges.

No. 201,903. Patented April 2, 1878.

Fig. 1.

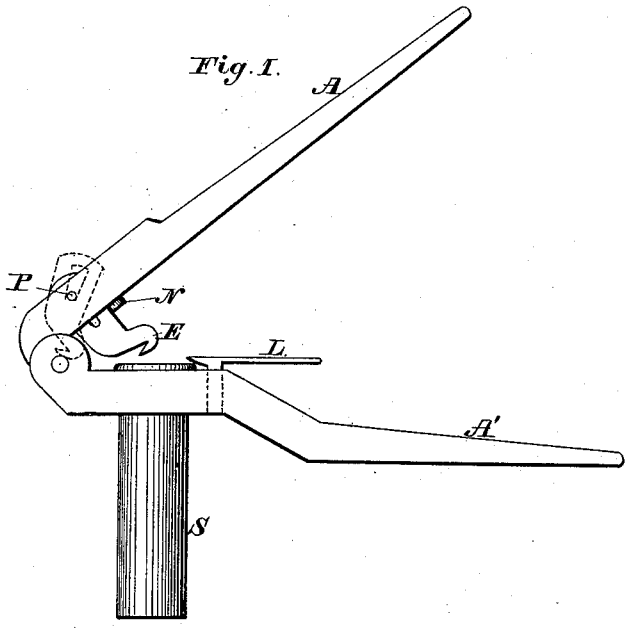
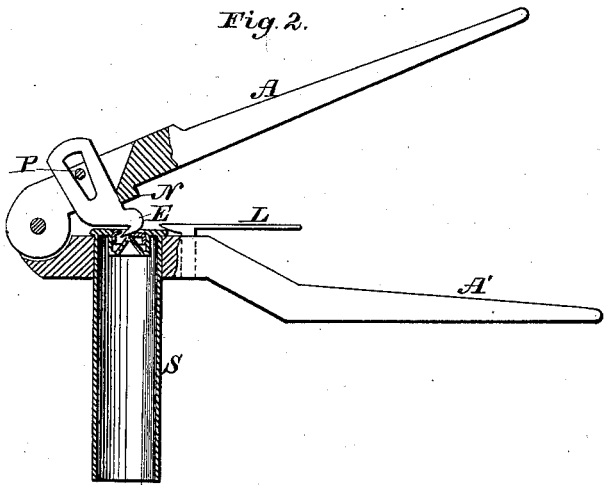


Fig. 2.



Attest.

Thos. K. Jones.

W. W. Cole.

Inventor:

Gilbert L. Bailey.

UNITED STATES PATENT OFFICE.

GILBERT L. BAILEY, OF PORTLAND, MAINE.

IMPROVEMENT IN IMPLEMENTS FOR CAPPING AND UNCAPPING CARTRIDGES.

Specification forming part of Letters Patent No. **201,903**, dated April 2, 1878; application filed February 11, 1878.

To all whom it may concern:

Be it known that I, GILBERT L. BAILEY, of Portland, in the county of Cumberland and State of Maine, have invented a new and useful Improvement in Implements for Uncapping and Recapping Cartridge-Shells, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a side view of the implement, showing it in position ready for use; and Fig. 2, a side sectional view, showing the construction and operation of my improvement.

The object of my invention is to furnish a device by which all ordinary primers of shells for rifles or shot-guns may be readily extracted from the outside; also, a combination of said device with a means of replacing the primer.

In the drawing, A A′ represent two levers connected by a hinge-joint. Lever A′ is wide enough to admit the shell S through a hole made near the fulcrum the size of the body of the shell, said shell resting on its flange, as shown in Fig. 1. A nib, N, is made on the under side of lever A, in such a position that when it is brought down said nib will rest upon the primer in the center of the head of the shell, and thus said primer may be forced into its place. To extract the primer, I provide a goose-neck-shaped hook, E, which is made of steel, about three-thirty-seconds of an inch in thickness, and of the form plainly shown at E, Fig. 2. The body of hook E works works loosely in a slit cut perpendicularly in the hinged end of lever A, said slit extending as far as nib N on the under side, and slanted to a point just beyond said nib on the upper side of said lever, as shown in the sectional view, Fig. 2. A narrow slot is made lengthwise in the body of hook E, through which a steel pin, P, fixed in lever A near its upper side, passes. The neck of hook E is bent back so as to bring its point nearly under the center of nib N when in position for use, which position it is made to assume by pressing with the finger on its top end. In this position, which is plainly shown in Fig. 1, the back of the hook, which is straight and smooth, rests against the front side, or that next the hinged end of the lever of nib N, while the top and back side of the slot rests against pin P.

Its operation is as follows: Lever A is brought down until the point of hook E rests in the cavity made in the primer when the shell is discharged. Here its downward progress is arrested, while, the motion of the lever continuing, nib N and pin P slide down the surfaces with which they are respectively in contact, and, acting in opposite directions, force the point of the hook through and under the top of the primer, as shown in Fig. 2. Lever A is then raised, and pin P coming in contact with the top of the slot in hook E, the primer is lifted from its seat.

To recap the shell, hook E is turned up so that its point rests on the fulcrum-pin of lever A, as shown in broken lines in Fig. 1, which leaves the implement free to be used as a recapper. The slot in the body of the hook is made wider at the upper end, so that pin P may not strike the opposite side when the lever is raised, which would tend to throw the point of the hook out from its hold on the primer.

It will be observed that the action of the two bearings on the edge surfaces of hook E must be in opposite directions in order to force the point through the primer. The same result may be obtained by making the body of the hook of a different form, wherein pin P, being placed near the lower side of the lever, will take the place of nib N, and act against the front side of the slot, while an extension of the body of the hook would rest on the upper side of the fulcrum-pin of the levers, and still the action would be the same.

It may also be applied to different forms of shell-holders, as may be readily conceived; but I prefer the form shown for all kinds of shells.

To prevent shell S from being withdrawn from its seat while extracting the primer, a stop, L, is provided, which is in the form of a lever, having its fulcrum in a projection at right angles near one end, on which a screw-thread is cut, and which is screwed into a tapped hole in lever A′, near where the flange of the shell rests. The short end of said lever projects slightly over the flange of shell S, thus holding it in

its place. By turning lever L to a position at right angles with lever A′ the shell may be withdrawn. This stop may be adjusted to the varying thicknesses of the heads of shells by turning the screw-fulcrum in or out.

I am aware that various devices for extracting primers from the outside, wherein straight chisels are forced through them at angles more or less acute, are in common use, and that some of these have been combined with recappers; also, that implements for putting on caps or primers simply, of a character similar to that herein described for that purpose, are well known and in public use, and these I do not claim as of my invention; but,

Having set forth my improvement, what I claim as my invention, and desire to secure by Letters Patent, is—

1. Hook E, slitted lever A, with its nib N and pin P, lever A′, and stop L, combined and operating as and for the purposes herein set forth.

2. The device for extracting a primer, said device consisting of pivoted slotted hook E and lever A, with its pin P, in combination with any suitable means of holding a cartridge shell, substantially as described.

3. In an implement for uncapping shells, lever-stop L, made in one piece, substantially as described, and having a threaded fulcrum, so that it can be adjusted to the varying thicknesses of the heads of shells by turning the lever to the right or left, as and for the purpose herein set forth.

GILBERT L. BAILEY.

Witnesses:

THOMAS K. JONES,

WARREN W. COLE.