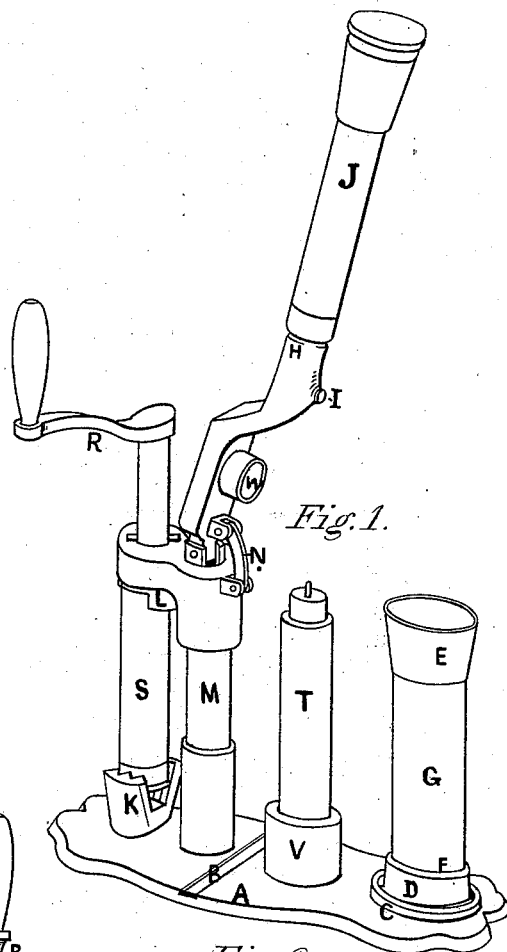
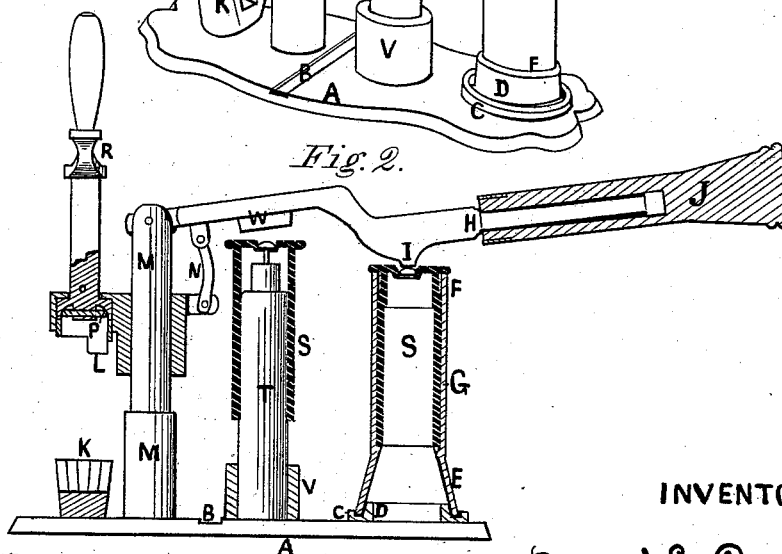


D. E. CAMPBELL.  
 Cartridge Capping and Loading Implement.  
 No. 217,335.      Patented July 8, 1879.



*Fig. 1.*



*Fig. 2.*

INVENTOR.

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*Sylvanus Walker*  
*Atty*

WITNESSES.

*H. S. Talbot*  
*W. R. Marble*

# UNITED STATES PATENT OFFICE

DANIEL E. CAMPBELL, OF NATICK, MASSACHUSETTS, ASSIGNOR TO WALTER H. PLIMPTON, OF SAME PLACE.

## IMPROVEMENT IN CARTRIDGE CAPPING AND LOADING IMPLEMENTS.

Specification forming part of Letters Patent No. **217,335**, dated July 8, 1879; application filed March 21, 1879.

*To all whom it may concern:*

Be it known that I, DANIEL E. CAMPBELL, of Natick, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Cartridge Capping, Uncapping, Loading, and Turning Devices or Implements, of which the following is a specification.

The object of my invention is to provide a compact, cheap, simple, and convenient device for capping, uncapping, loading, and turning paper or metallic cartridges; and it consists, principally, in a rotary turning device so arranged as to permit of vertical movement being communicated to its case by a hand-lever at the same time the rotary motion is imparted to the turner by a hand-crank in the act of turning a cartridge, as hereinafter more fully described and set forth.

Figure 1 is a perspective view of my invention. Fig. 2 is a vertical section of the same.

A represents a metallic base-plate, having a recess or groove, B, provided upon its upper surface to receive a suitable clamp to secure the device temporarily in position upon a bench or table for use.

The upper surface of the base-plate is provided near one end with double sockets C and D, the latter of which is located within the former, as shown. The outer one, C, is adapted to fit the enlarged or conical end E of the loading and capping cylinder or tube G when placed therein, with the cartridge S inserted within the upper end, F, so as to permit the "percussion-cap" to be forced into position in the "shell" by means of the hand-lever H, bringing the projection I to bear upon the end of the same.

The tube or cylinder G may be removed and reversed, placing the end F, containing the cartridge, in the inner socket, D, so as to permit the "charge" to be placed in the same through the enlarged conical end E. Then the charge may be confined therein by a

suitable "wad," which may be forced downward, as desired, by means of the said handle J, which is removable from the hand-lever H for the purpose.

If it is desirable to reduce the length of the cartridge-shell S, it is placed vertically, with the metallic or capped end, within the serrated incline jaws K at the opposite end of the device, the upper end of the shell being received within the cap L, which has a short arm provided with an opening which fits upon the vertical post M, and has connected therewith, by a hinge-joint, a short curved arm, N, its upper end being similarly connected with the hand-lever H near its inner end, which is pivoted or hinged to the extreme upper end of the vertical support or post M.

Within the cap L is arranged a rotary turner, P, having the usual means for turning inwardly the end of the shell by being rotated by the hand-crank R, and at the same time pressed downwardly by means of the hand-lever H, which slides the turning device L P R up and down freely upon the vertical post M in the act of turning a cartridge and removing the same.

In order to facilitate the removal of an old or exploded cap from the end of a cartridge, S, a metal standard or adjustable post, T, is inserted in the socket V, having a point or pin which comes in contact with the interior of the exploded cap when the empty cartridge is placed upon the top of the upright or post T, and the hand-lever H is forced downward upon the same. The percussion or exploded cap is removed by being forced upwardly into the cavity W, formed upon the under side of the hand-lever H, as shown, when the empty cartridge-shell may be reloaded or charged, as before.

By means of the vertically-sliding turning mechanism I am enabled to turn a shell or end of a cartridge in a very quick, easy, and convenient manner, rendering the same more

satisfactory than by the devices heretofore constructed for the purpose, as well as to form a more compact device or implement.

Having thus described my invention, what I claim is—

1. The combination of the double sockets C D and loading-tube G with the post M, arm N, hand-lever H, cap L, turner P, and crank R, all being constructed and arranged to operate substantially in the manner described, as and for the purposes set forth.

2. The double sockets C D, arranged as shown and described, in combination with the loading-tube G, adapted to be supported therein, substantially as and for the purposes set forth.

DANIEL E. CAMPBELL.

Witnesses:

JAMES P. GILBERT,  
WALTER H. PLIMPTON.