

G. E. HART & J. LOGAN.
Cartridge-Loading and Cap-Extracting Implements.
 No. 151,122. Patented May 19, 1874.

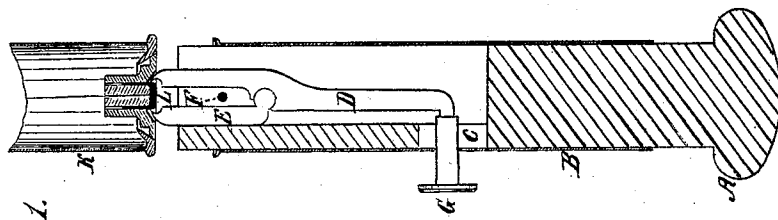


Fig. 1.

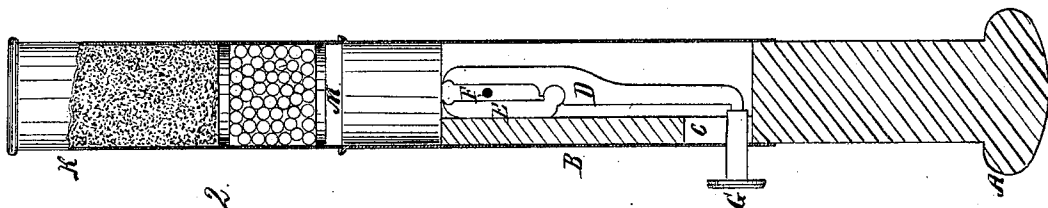


Fig. 2.

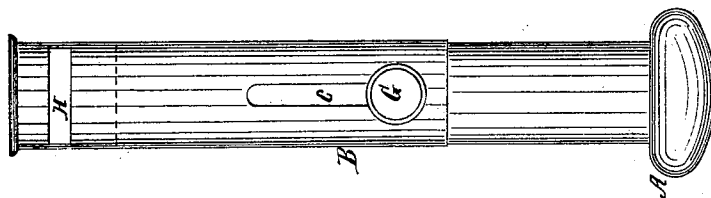


Fig. 3.

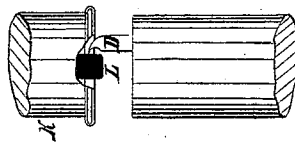


Fig. 4.

*Wells & Co.
 Samuel Browne*

*George E. Hart.
 John Logan.
 by their atty
 J. E. Dane Jr.*

UNITED STATES PATENT OFFICE.

GEORGE E. HART, OF NEWARK, AND JOHN LOGAN, OF JERSEY CITY, NEW JERSEY; SAID LOGAN ASSIGNOR TO SAID HART.

IMPROVEMENT IN CARTRIDGE-LOADING AND CAP-EXTRACTING IMPLEMENTS.

Specification forming part of Letters Patent No. **151,122**, dated May 19, 1874; application filed October 16, 1873.

To all whom it may concern:

Be it known that we, GEORGE E. HART, of the city of Newark, in the county of Essex and State of New Jersey, and JOHN LOGAN, of Jersey City, in the county of Hudson and State of New Jersey, have invented new and useful Improvements in Cartridge-Shell Loaders and Cap-Extractors; and we do hereby declare that the following specification, taken in connection with the drawings furnished, is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same.

Figure 1 represents a sectional view of our improvement, showing the clutch or nippers in position clasp ing a cap upon the nipple of the shell. Fig. 2 represents our invention in position for forcing a wad into a shell. Fig. 3 represents the former figures in a finished condition. Fig. 4 represents a section of the loader, extractor, and shell, with one portion of the nipper projecting and in position for removing a cap.

The object of our invention is to combine in one device a shell-loader and cap-extractor; and it consists of a tube or cylinder made sufficiently large at its mouth to closely fit over the shell, with a side opening to admit the wad, which is forced into position in said shell by a plunger, said plunger being provided with means for extracting a cap from the shell when loaded or otherwise, which may be in the form of nippers, or a single-pointed instrument made to retract when to be used in loading, &c.

In the drawings, A represents a plunger; B, cylinder; C, opening in which the extractor is arranged and operates; D, part of the extractor; E, swinging part jointed to D, which forms the nippers. F is a pin passing through the plunger between the nippers to keep them in position. G is a knob secured to that part of the piece D serving to operate the extract-

ing device by means of the thumb or finger. H is an opening to receive the wad before being forced into the shell; K, breech part of a shell; L, percussion-cap; M, wad.

To use said invention, which is made of various sizes, place a wad into the opening H, and then force it downward by the plunger A until said wad is between the opening H and the mouth of the cylinder; place the latter over the shell, and a thrust of the plunger drives it to its position.

The cylinder or sleeve may be made of metal tubing, and the plunger of wood or other material.

The opening to receive the nippers is formed by sawing. Said nippers may be made of steel or other hard metal, formed by dies or other means, and may be riveted instead of being jointed, as shown; or one point may be employed, as shown in Fig. 4.

The sleeve B may be dispensed with when desirable to use the plunger without.

It will be observed that the ear or thumb piece of the nippers or hook serves to secure the sleeve and rammer together.

Having thus set forth our invention, what we claim as new, and desire to secure by Letters Patent of the United States, is—

1. In combination with a tool for loading cartridge-shells, a retracting hook or nippers for the purpose of extracting caps, substantially as set forth.

2. The combination of the rammer, sleeve, and the nippers or hook, whereby the former are held together, substantially as set forth.

3. The combination, with the sleeve provided with slots H and C, of the rammer and the nippers, substantially as and for the purposes set forth.

GEORGE E. HART.

JOHN LOGAN.

Witnesses:

JOHN DANE, Jr.,

SAMUEL W. TOWNE.