LOGAN & ELDREDGE.

Cartridge Cap Extractor.

No. 110,052. Patented Dec. 13, 1870.

Fig. 1

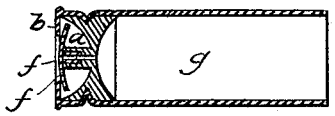


Fig. 2

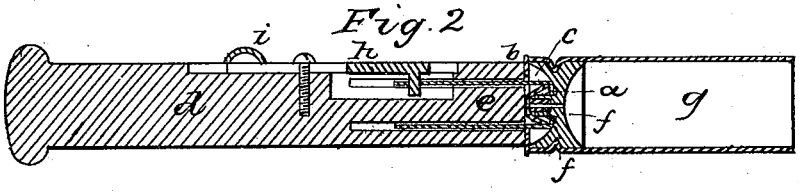


Fig. 3

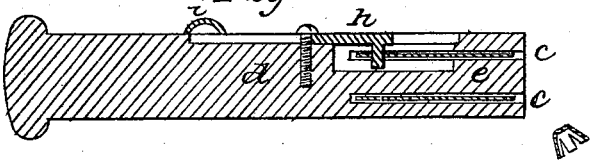
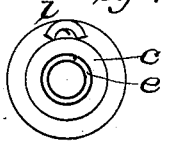


Fig. 4



Witnesses

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JOHN LOGAN AND DANIEL W. ELDREDGE, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 110,052, dated December 13, 1870.

IMPROVEMENT IN CARTRIDGE-CAP EXTRACTORS.

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, JOHN LOGAN and DANIEL W. ELDREDGE, both of Boston, in the county of Suffolk and State of Massachusetts, have invented jointly an Apparatus for Removing Exploded Caps from Cartridge-Shells; and we do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of our invention sufficient to enable those skilled in the art to practice it.

This invention relates to a hand apparatus for removing exploded caps from cartridge-shells of that class in each of which there is in the base around the cap-nipple a cavity partially inclosed by an inwardly-projecting flange, such shells being designed for use with breech-loading guns, and the flange mentioned being designed to retain the exploded caps, so as to prevent them from getting into and clogging the breech or the mechanism by which it is opened and closed.

While cartridge-shells so constructed answer well the purposes for which they were designed, users of them find some annoyance on account of the difficulty with which exploded caps are removed from the flanged cavity, which removal has to be effected before the shell can be recapped.

In Figure 1 is shown a cartridge-shell, on the nipple of which a cap has been exploded, the cap in such case being in the position and condition indicated at *a* in said figure, and spreading so as to be of greater diameter than the opening through flange *b*.

In our invention we make use of a tube, the outside diameter of which is such as to enter easily the opening in flange *b*, thereby deflecting the expanded parts of the exploded cap and encompassing them, so that, upon withdrawal of said tube, the cap is also withdrawn.

This tube, which is marked *c*, is so mounted or arranged in a handle, *d*, that it may be pushed outward therefrom, and may be withdrawn into the handle over a central plug or core, *e*.

In Figure 2 this device is shown in longitudinal section, with the tube *c* protruded and introduced into the cavity in the shell *g* surrounding the nipple *f*, and exhibiting the cap as partly compressed from its expanded condition and encompassed by tube *c*.

In Figure 3 the tube *c* is represented as drawn back into the handle *d*, so as to free the cap, which is shown as falling from the device.

In the handle *d* is cut a recess in which a slide, *h*, is located, said slide being connected to the tube *c*, so that, by application of a slight degree of force to the knob *i* on the slide, the tube *c* can be projected and retracted at will.

Figure 4 of the drawing represents a front-end view of the device.

The handle *d* is made of such diameter as to easily enter the bore of the cartridge-shells, so that it may be used as a rammer to force wads home in the shells over the charges of powder and shot, so that the device described serves the double purpose of a rammer and of a cap-extractor.

We claim—

A cap-extractor, made with a tube, *c*, and a plug, *e*, combined and arranged substantially as described, so that, by relative movement produced between said parts, a cap received and withdrawn by application of the tube, as set forth, will be discharged therefrom.

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Witnesses:
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