

G. S. GREENE, Jr.

Cartridge Capping and Uncapping Devices.

No. 137,071.

Patented March 25, 1873.

Fig. 1.

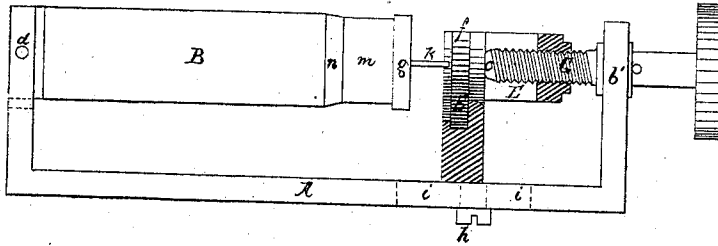


Fig. 2.

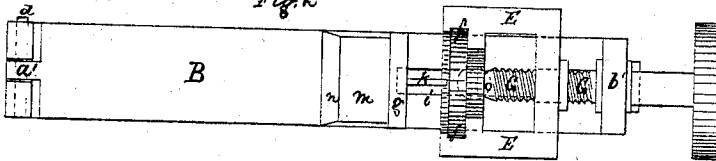


Fig. 3.

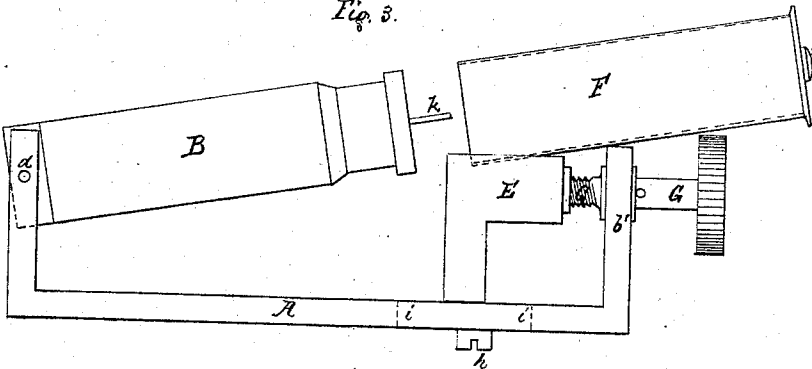


Fig. 4.

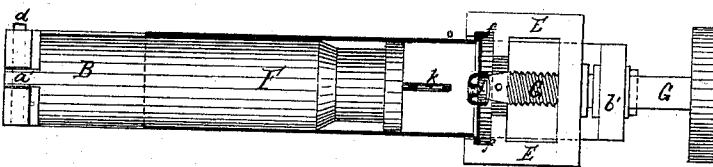
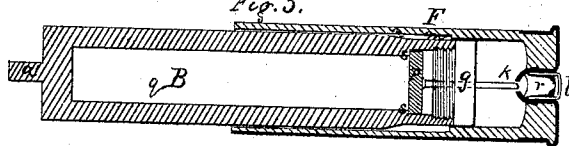


Fig. 5.



WITNESSES-

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UNITED STATES PATENT OFFICE.

GEORGE S. GREENE, JR., OF MOTT HAVEN, NEW YORK.

IMPROVEMENT IN CARTRIDGE CAPPING AND UNCAPPING DEVICES.

Specification forming part of Letters Patent No. 137,071, dated March 25, 1873.

To all whom it may concern:

Be it known that I, GEORGE S. GREENE, JR., of Mott Haven, in the county of Westchester and State of New York, have invented certain Improvements in Cartridge-Case Cap Adjuster and Extractor, of which the following is a specification:

The first part of my invention relates to the cartridge-case mover or chair E, or its equivalent, provided with means for grasping the cartridge-case by the rim, combined with a longitudinally-fixed screw, G, forming an abutment for capping the case, in connection with the guide or holder B, pin *k*, and cap *g*. The second part of my invention relates to the vibrating cartridge guide or holder B, combined with a chair or cartridge-case mover, E. The third part of my invention relates to the perforated movable cap *g*, in connection with the pin *k* and guide B. The fourth part of my invention relates to the combination, with the guide or holder B, of the movable pin-holder *g*, whereby the machine is adapted to be used with either metallic or paper cartridge-cases.

Figure 1 is a side elevation of the machine embodying my invention. Fig. 2 is a top view of the same. Fig. 3 is a side view of my invention with the cartridge-case holder thrown up ready to receive the cartridge case or shell. Fig. 4 is a top view of the same with the cartridge-case in its position for operation, the rim being held by the movable chair ready for capping or uncapping the cartridge-case. Fig. 5 is a sectional view of the hollow cartridge-case holder, showing the pin and cap of same.

A is the frame of the machine, which frame should be substantially constructed for the reception and working of the movable parts. B is the cartridge-case guide or holder, one end of which is flattened into a tongue, *a'*, which fits easily into the slot C cut into one end of the frame. The tongue *a'* is hinged into the slot C by a pin, *d*, so as to allow a moderate swing or vibration, as seen in Fig. 3. E is the sliding chair or nut, grooved in the manner as shown at *ff*, to receive the rim of the head of a cartridge-case. G is a four-threaded screw, which is collared at *b'* into one end of the frame A, so that when a rotary motion is given to the screw it will

have no backward or forward motion imparted to it, while the nut or chair E, being a female screw, will travel forward or backward on the same, being kept in an upright position by the tongue *h*, which moves freely in the slot *i* in the bottom of the frame.

The cartridge cases or shells to be capped or uncapped are placed upon the holder, as in Figs. 3 and 4. F shows the cartridge-case about to be thrust upon the holder B, Fig. 3. The percussion-cap *l* is then set in its position by hand in the depression made for it over the touch-hole in the rear of the cartridge-case. The holder is then allowed to fall, as seen in Fig. 4, bringing the rim of the cartridge into the groove *f*. A right-hand motion now being given to the four-threaded screw G, causes the nut or chair E to travel up the screw, and brings the cap *l* in contact with its point *o*, forcing the cap home into the receptacle made for it at the touch-hole of the cartridge-case. Now, if an exploded cap is to be forced out from the touch-hole of the cartridge-case, an opposite motion of the screw G is required, which will drive the nut or chair down the screw G and force the head of the cartridge-case against the pin *k*, the continued motion of which drives the cap out from the touch-hole, when the cartridge-case is again ready for recapping.

Fig. 5 is a cross-section of cartridge-case holder; *g*, the cap or pin holder; *k*, the pin; *p*, the disk which fits upon the shoulder *s s*, preventing the pin from being forced into the chamber *q* B, which is made to contain extra pins, &c. *m* shows the decreased diameter of the holder; *n*, the shoulder, the decreased diameter being made to fit into the re-enforce of paper cartridges. When the small cap *g* or pin-holder is used for the metal cartridge-cases, a larger head is used, as they are made with no re-enforce, this difference in paper or metal cartridge-cases of the same gage being well understood. Fig. 5 also shows the position of the paper cartridge-shell F in relation to the pin *k* and guide or holder B as it would be previous to forcing off the cap *l*. *r* is one form of anvil for the cap.

I claim as my invention and desire to secure by Letters Patent—

1. The cartridge-case mover or chair E, or

its equivalent, provided with means for grasping the cartridge-case by the rim, combined with a longitudinally-fixed screw, G, forming an abutment for capping the case, in connection with the guide or holder B, pin *k*, and cap *g*, all arranged and operating substantially and for the purposes specified.

2. The vibrating cartridge-case guide B, combined with a chair or cartridge-case mover E, substantially as and for the purposes specified.

3. The perforated removable cap *g*, in combination with the pin *k* and guide B, substantially and for the purposes specified.

4. The combination, with the guide or holder B, of the removable pin-holder *g*, whereby the instrument is adapted to be used with cartridges of different construction, as specified.

G. S. GREENE, JR.

Witnesses:

ROBT. WEIR,
T. B. BEECHER.