(No Model.)

# F. C. WASHBURN.

## CARTRIDGE LOADING IMPLEMENT.

No. 345,343. Patented July 13, 1886.

Fig. 1.

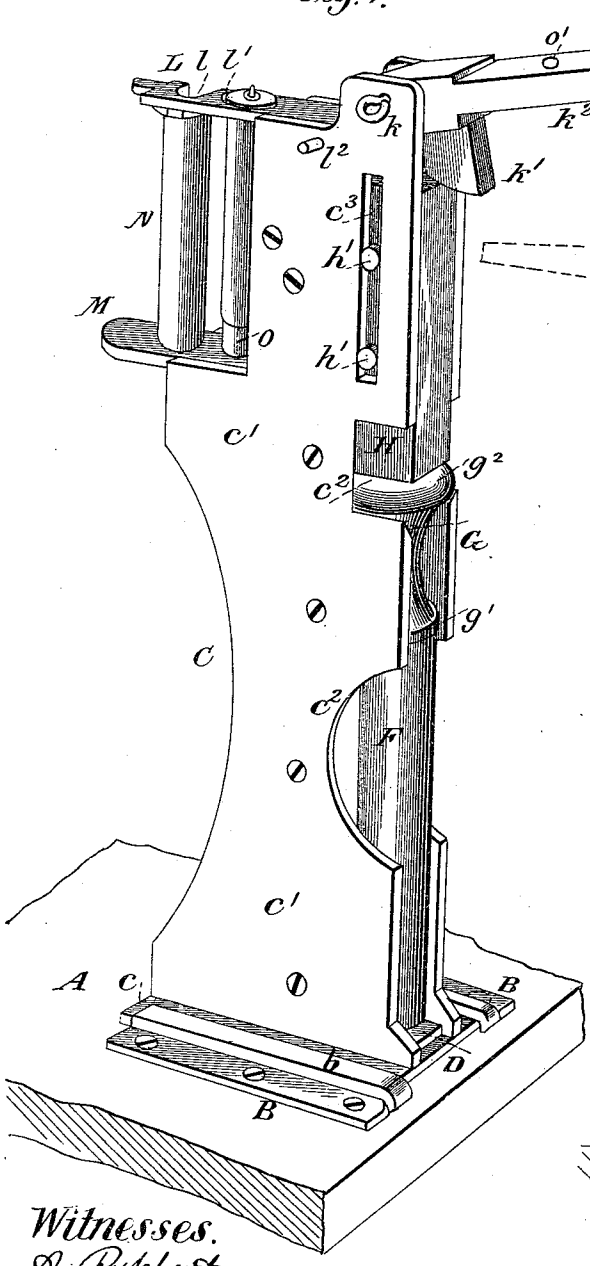
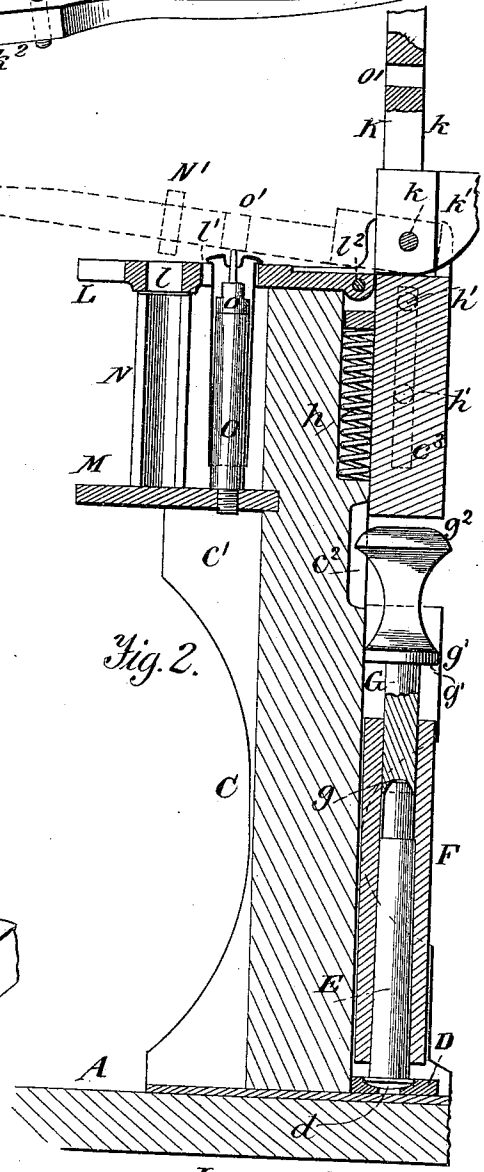



Fig. 2.




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# UNITED STATES PATENT OFFICE.

FREEMAN C. WASHBURN, OF WELLSBOROUGH, PENNSYLVANIA.

## CARTRIDGE-LOADING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 345,343, dated July 13, 1886.

Application filed April 27, 1886. Serial No. 200,271. (No model.)

*To all whom it may concern:*

Be it known that I, FREEMAN C. WASHBURN, a citizen of the United States, residing at Wellsborough, in the county of Tioga and State of Pennsylvania, have invented certain new and useful Improvements in Loading, Capping, and Uncapping Shells; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

Figure 1 of the drawings is an elevation in perspective, showing the plunger forced down on the head of the ramrner. Fig. 2 is a sectional elevation.

In the drawings, A represents the base, on which are fastened the two parallel plates B B, having the raised flanges *b b*, which form subjacent grooves for the projecting edges or flanges *c c* on the bottom of frame C. The latter is thus held in an upright position when the machine is being used, and may be removed for transportation, or for being conveniently packed away. In the latter case the base may serve as the top of the box in which it is packed. The vertical parallel flanges $c'$ $c'$ are cut out at $c^2$ for convenience in manipulation, and inclosed at the bottom, a plate, D, countersunk at *d* to receive the shell-cap and head, which protrude from the lower end of the tubular holder F, in which the shell E is placed.

In the upper end of the tube F fits the rammer G, which is concaved at *g* in its end to receive the bullet, has a shoulder, $g'$, to regulate the depth to which it may go, and is provided with a head, $g^2$, upon which comes the pressure of a plunger, H. The latter has a retracting-spring, *h*, and side lugs, $h'$, which slide in the vertical slots $c^3$ $c^3$ and thus guide it in a straight line.

K is a lever working on a fulcrum, *k*, and carrying the cam $k'$, which forces down the plunger H, while it has a flat part, $k^2$, which is shaped to do the capping and uncapping.

L M are two horizontal parallel and projecting plates, of which the top one is apertured at *l* $l'$, to receive the shell, and hinged at $l^2$, so as to fold back when a shell is to be entered for uncapping.

On the plate M is the half-tube N, which receives the cartridge-shell which is to be capped, and the round bar or rod O, carrying on its top the punch *o*. Over this punch and rod is slipped the shell which is to be uncapped.

The lever K has in its flat part $k^2$ a punch, N′, which does the capping, and a hole, O′, which receives the uncapping-punch when the lever forces the shell down over the bar O, the cap being thus removed from the shell and driven up into the hole O′.

In loading a shell, it is first capped by placing a cap in the opening at the base of the shell; next, the shell is placed in the half-cylinder and then the lever is brought down to force the cap to its desired position; next, the powder is poured in from a measure and a wad is sometimes put over the powder, but not always; the ball or bullet is then dropped point foremost into the loading-tube; finally, all are placed perpendicularly under the lever, the latter is pressed down, and the loading is completed.

After shells have been used they must be decapped by placing the shell point foremost upon the iron rod which has the small pin projecting from its end and bringing down the lever to force out the old cap. After the first shell has been decapped, one motion of the lever serves to decap and recap all succeeding shells, one shell to be decapped and another to be recapped being in their respective places at the same time, one on the rod, the other in the semicircular slot. One motion of the lever effects both objects.

What I claim as new, and desire to protect by Letters Patent, is—

1. In a shell-loader, the combination, with a frame, C, having the vertical flanges $c'$ $c'$, with excisions $c^2$ $c^2$ and the slots $c^3$ $c^3$, of the plate D, arranged at the bottom of the opening between the flanges $c'$ $c'$ and countersunk to receive the shell-cap, the shouldered rammer

G, end concaved to fit on one end of the shell, the plunger H, having a spring-retractor, *k*, and the side lugs, *k' k'*, to slide in the slots $c^3$ $c^3$, and the lever K, having the end cam, *k*, as shown and described.

2. In a shell capper and decapper, the combination, with a supporting-frame, C, of the horizontal, parallel, and projecting plates L M, the top one, L, apertured at *l l'* and hinged at $l^2$, the capper half-tube N, the cylinder O, having the decapping-punch *o* at the top, and the lever K, provided with the flat portion *k'*, having the hole O', to receive the decapping-punch *o*, and the capping-punch N', to operate with the half-tube N, all substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

FREEMAN C. WASHBURN.

Witnesses:

ED. M. FISCHLER,

ROBT. C. SIMPSON.