# W. G. RAWBONE.

## Cartridge-Loading Implement.

No. 161,636. Patented April 6, 1875.

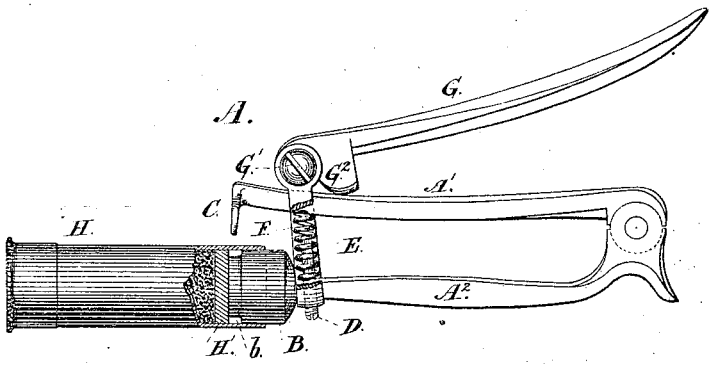


Fig. 1.

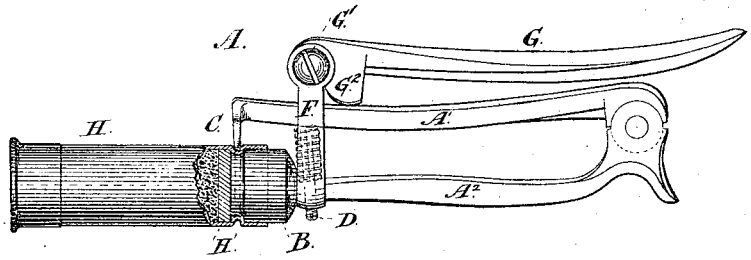


Fig. 2.

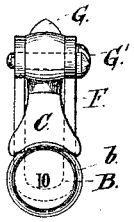


Fig. 3

Witnesses:

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# UNITED STATES PATENT OFFICE.

WILLIAM G. RAWBONE, OF TORONTO, CANADA.

## IMPROVEMENT IN CARTRIDGE-LOADING IMPLEMENTS.

Specification forming part of Letters Patent No. **161,636**, dated April 6, 1875; application filed February 12, 1875.

*To all whom it may concern:*

Be it known that I, W. G. RAWBONE, of the city of Toronto, Province of Ontario, Canada, have invented Improvements in Cartridge-Creasers, of which the following is a specification:

My invention has relation more particularly to improvements in the construction of instruments for loading and creasing the cartridges of breech-loading fire-arms, with the object of pressing home the wad and retaining it in proper position; and it consists of two levers placed one above the other, and connected together at one end by a knuckle-joint. The other end of the lower lever has attached a cylindrical head, which fits into the cartridge. The front end of this head is reduced, forming a shoulder, which receives the "creasing-bit" attached to the corresponding end of the upper lever when the two are pressed together.

My invention consists, further, of an adjustable pin placed near the front end of the lower lever, for the purpose of regulating the depth of the crease. This pin also serves as a steady-pin for a spiral spring, which throws and holds the levers apart immediately the creasing-pressure is withdrawn.

My invention consists, lastly, of a hand-lever pivoted above the upper arm to a link which passes under the lower arm, immediately behind the cylindrical head. This hand-lever is fashioned, near its point of connection, with a downwardly-projecting cam, which, when the lever is depressed, by closing the hand, forces the two hinged arms together with the required pressure to form the crease.

The object of my invention is to enable cartridges to be correctly and rapidly creased without inconvenience to the hand of the operator.

In the accompanying drawings, Figure 1 is a side view of my creaser, showing the cartridge on the cylindrical head ready to be creased. Fig. 2 is a side view of the same, showing the position and action of the parts during the creasing operation. Fig. 3 is a front view of the creaser.

A is the creaser, consisting of the two arms or levers $A^1$ and $A^2$, connected at one end by a knuckle-joint, which allows only an up-and-down motion to the arms. B is the cylindrical head attached to the lower arm. This head may be of any desired diameter to suit the different sizes of cartridges. The front end of the head is reduced for a short distance, forming a shoulder or recess, *b*, into which the creaser-bit C on the end of the upper arm $A^1$ fits when the two arms are pressed together. D is a screwed adjusting-pin passing up through the lower arm, the top forming a variable stop for the upper arm to regulate the depth of the crease. E is a spiral spring coiled around the adjusting-pin for the purpose of keeping the arms apart. F is a U-shaped link passing under and around both the arms, the sides at the top being connected to the pressure-lever G by the pin $G^1$. This link is held in place by the end of the adjusting-pin D and the expansive action of the spring F, and it serves as a stop to limit the distance the arms can be sprung open, and as a connection for drawing the arms $A^1$ and $A^2$ together when the long arm of the lever G is depressed. $G^2$ is a cam attached to the lever G near its point of connection, which, as the lever is depressed, forces down the upper arm with any required power.

The edge of the creaser-bit C, where it bears on the cartridge, is concave, the circle on which the edge is struck being larger in diameter than the cartridge, and the corners are rounded, so that, as the cartridge is made to revolve with one hand and the pressure applied with the other, the bit slips easily over the cartridge, gradually sinking the crease and compressing without tearing or loosening the layers of the shell. This is an advantage which greatly lengthens the life of a cartridge-shell.

H is the cartridge; H′, the wad.

In cartridge-creasers now in the market a great objection to their general use is that they hurt the hand of the operator when a number of cartridges are to be creased, from the amount of force needed to sink the crease. This disadvantage is entirely overcome by my construction, as more than the required degree of force can be applied with but a small amount of pressure on the hand.

I claim as my invention—

1. The pressure-lever G, with cam $G^2$, link F, and pin $G^1$, in combination with the arm $A^1$, with creaser-bit C, and arm $A^2$, with head B, arranged and operating substantially as described, and for the purpose specified.

2. The lever-arm $A^2$, adjusting-pin D, and spring E, or its equivalent, in combination with the upper arm $A^1$, arranged and operating substantially as described, and for the purpose specified.

W. G. RAWBONE.

Witnesses:
GEO. A. AIRD,
JOSEPH KILGOUR.