(No Model.)

G. W. CHAMBERS & B. F. GRUVER.

RELOADER FOR CARTRIDGES.

No. 492,324. Patented Feb. 21, 1893.

Fig. 1

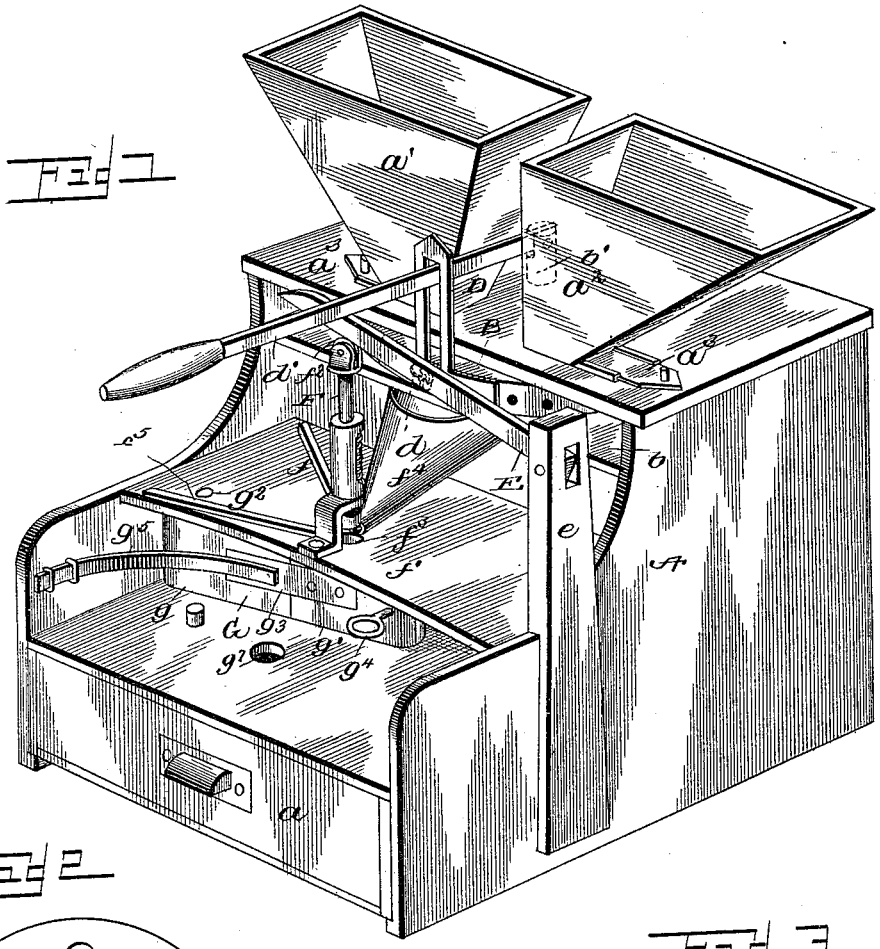


Fig. 2

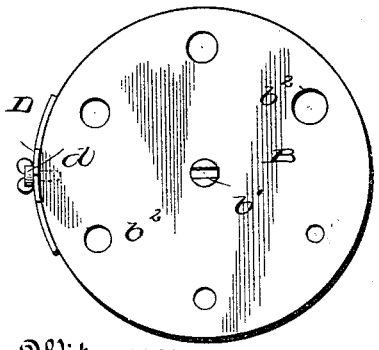
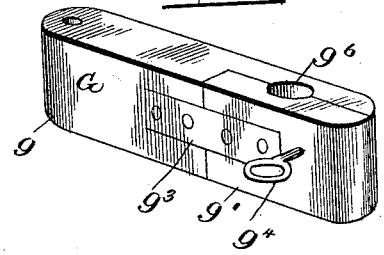


Fig. 3



Witnesses

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UNITED STATES PATENT OFFICE.

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RELOADER FOR CARTRIDGES.

SPECIFICATION forming part of Letters Patent No. 492,324, dated February 21, 1893.

Application filed January 18, 1892. Renewed December 22, 1892. Serial No. 455,985. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. CHAMBERS and BENJAMIN F. GRUVER, of Bitter Water, in the county of San Benito and State of California, have invented certain new and useful Improvements in Reloaders for Cartridges; and we 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.

This invention relates to a reloader for cartridges, and has for its object the production of new and improved highly efficient mechanism whereby a cartridge can be readily and easily reloaded, said mechanism embracing advantages in point of simplicity, inexpensiveness and durability.

The invention comprises the detail construction, combination and arrangement of parts, substantially as hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings:—Figure 1 is a view in perspective of our improved reloader. Fig. 2 is a plan view of the charge-plate. Fig. 3 is a detail view of the shell holder.

Referring to the drawings, A designates the box or casing the front of which is open; and *a* a drawer which is free to be readily drawn outward. To the top of box A are secured two hoppers a', a^2, the former for shot and the latter for powder. Beneath the lower, discharge ends of these hoppers are slides or cut-offs a^3, which can be easily opened and closed by the operator.

B is the charge-plate located between the top of the box A, and a partition *b* parallel with said top. This charge-plate is circular and is mounted on a central pivot rod b' which projects from board *b* up through an opening in said top. In this charge-plate, near its periphery, are holes or openings b^2 of various sizes for reception of the powder and shot from the hoppers. To the periphery of this charge-plate is secured by means of a thumb-screw *d* the lower end of a vertical guide-loop D. Through this guide-loop is projected an operating lever d', which is pivotally connected to the upper end of pivot rod b'. This guide loop can be secured at any point on the periphery of the charge-plate, according to the set of holes of said charge plate being used.

E is a second lever fulcrumed at its outer end in an opening in a vertical post *e* attached to box A. This lever receives the pressure of operating lever d'.

F is a spring-held plunger located in the cylindrical portion of a post or bracket *f* secured to a shelf or partition f' attached to the sides of box A beneath board *b* and above drawer *a*. In the upper end of plunger F is a roller f^2 upon which lever E bears. By pressing on lever d' the lever E will depress plunger F, causing the same to enter a hole or opening f^3 in shelf f'. A chute f^4 attached to the underside of board *b* leads to the opening f^3, the upper widened end of said chute being extended beyond the two openings in board *b* with which the respective powder and shot openings in charge-plate B are designed to coincide. Two convergent ribs f^5 on shelf f' serve as guides for the wads which are placed on said shelf.

G is the cartridge shell holder located between shelf f' and the top or cover of drawer *a*. This holder is composed of two parts *g*, g', the former being pivoted at g^2, and the latter part g' is designed to fit in a cut-away portion of the former, to which it is attached by a yielding spring-plate g^3. A loop handle or pull g^4 is connected to part g', and a flat plate spring g^5 attached to one side of box A, bears at its inner, free end on spring-plate g^3, and serves to normally retain the holder closed. In the parts *g*, g', are formed coincident grooves or recesses forming conjunctively an opening g^6 for the cartridge shell, which latter is held directly beneath the opening f^3 to receive the load and permit the plunger to be depressed therein. When the reloading operation is completed the operator pulls on the holder G by pull g^4 and bringing the holder outward and separating the parts thereof the reloaded cartridge is free to fall through an opening g^7 into drawer *a*. When a sufficient number of cartridges have been

accumulated in said drawer the latter can be entirely removed and then replaced after being freed of its load.

A reloader thus constructed is extremely simple, inexpensive, strong, lasting and durable, and is not liable to readily get out of order or any of its parts become deranged.

We claim as our invention—

1. The herein-described improved cartridge reloader, comprising the box or casing, the hoppers located at the upper portion thereof, the charge-plate located beneath said hoppers and having holes or openings therein, the guide-loop projecting from said charge-plate, the operating lever projected through and engaging said guide-loop, the spring-held plunger, the lever bearing thereon, the chute leading from beneath said charge-plate, and the cartridge holder, substantiallly as set forth.

2. The herein-described improved cartridge reloader, comprising the box or casing, the hoppers located at the upper portion thereof, the slides or cut-offs working in the lower ends of said hoppers, the circular charge-plate mounted beneath said hoppers and having holes or openings therein, the guide-loop adjustably secured to said charge-plate, the chute leading from beneath said charge-plate, the main operating lever connected to the pivot rod of said charge-plate and projected through said guide-loop, the spring-held plunger having a roller in its upper end, the second lever bearing thereon the shelf having guides for the wads, and the cartridge shell holder, substantially as set forth.

3. The combination with the box or casing, having a drawer, a shelf having an opening and guide-ribs for the wads, and the chute leading to said opening, of the hoppers and movable charge-plate, the plunger located over said opening, means for operating said plunger and charge-plate, and the cartridge shell holder located between said drawer and shelf and composed of two parts yieldingly connected together, substantially as set forth.

4. The combination in a cartridge reloader, of a box or casing having a drawer and an upper hole or opening, a holder composed of two parts, one of which is pivoted and has a cut-away portion in which the other part fits, the yielding connection between said parts, the spring normally retaining said holder closed, and a finger pull attached to one of said parts of the holder, substantially as set forth.

5. The herein-described improved cartridge reloader consisting of the box or casing having a drawer and a hole or opening, a shelf provided with an opening and guide ribs converging thereto, a board or partition having holes or openings, a chute leading therefrom to said opening in said shelf, the hoppers secured to the top of said box and having slides or cut-offs, the circular charge-plate having holes or openings, the guide-loop projecting from said charge plate, the main operating lever extended through said guide-loop, the spring-held plunger having a roller, the bracket for said plunger, the second lever bearing on said roller, the holder composed of two parts yieldingly connected together, one of said parts being pivoted, the spring bearing against said holder and normally retaining the same closed, and the finger pull extending from one of said parts of the holder, substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

GEORGE W. CHAMBERS.
BENJAMIN F. GRUVER.

Witnesses:
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