

(No Model.)

S. McNEILL & O. H. DENISE.
CARTRIDGE LOADING IMPLEMENT.

No. 545,811.

Patented Sept. 3, 1895.

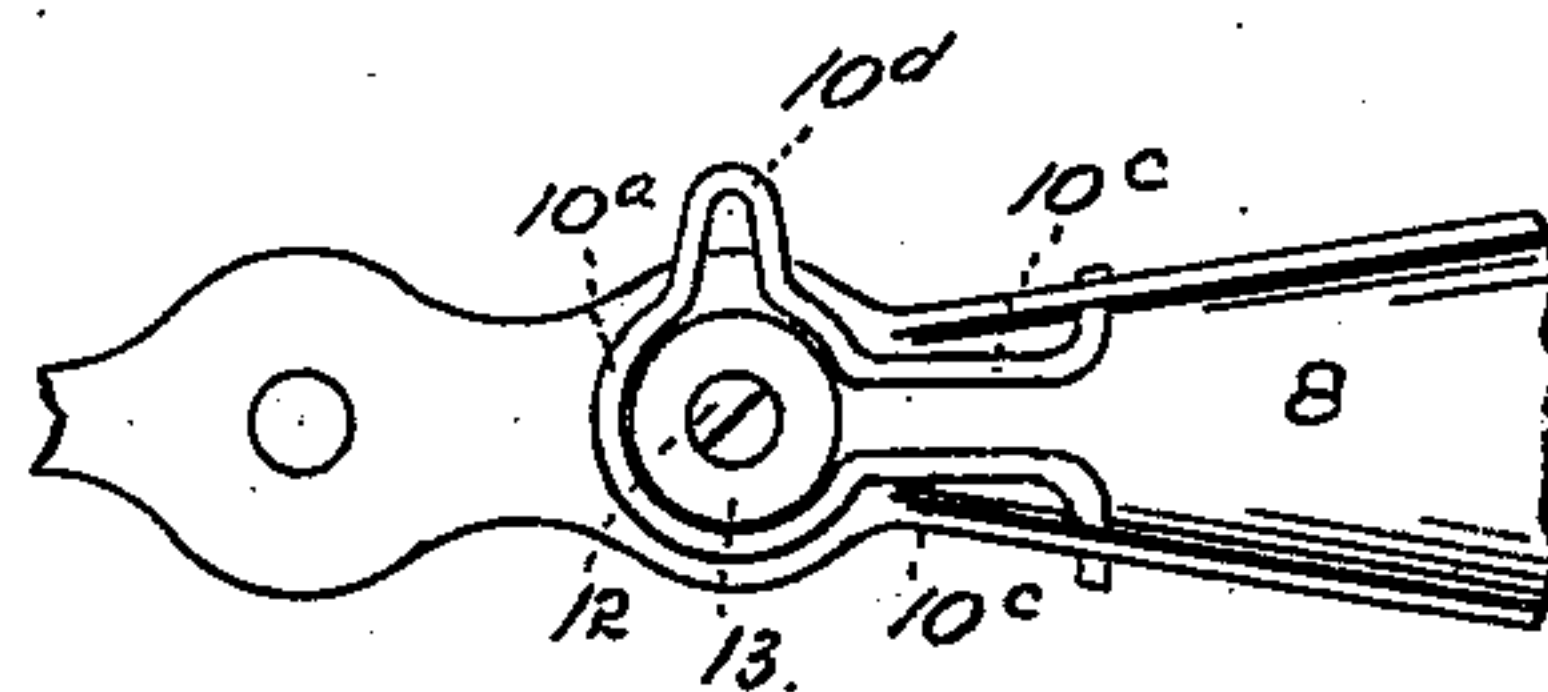
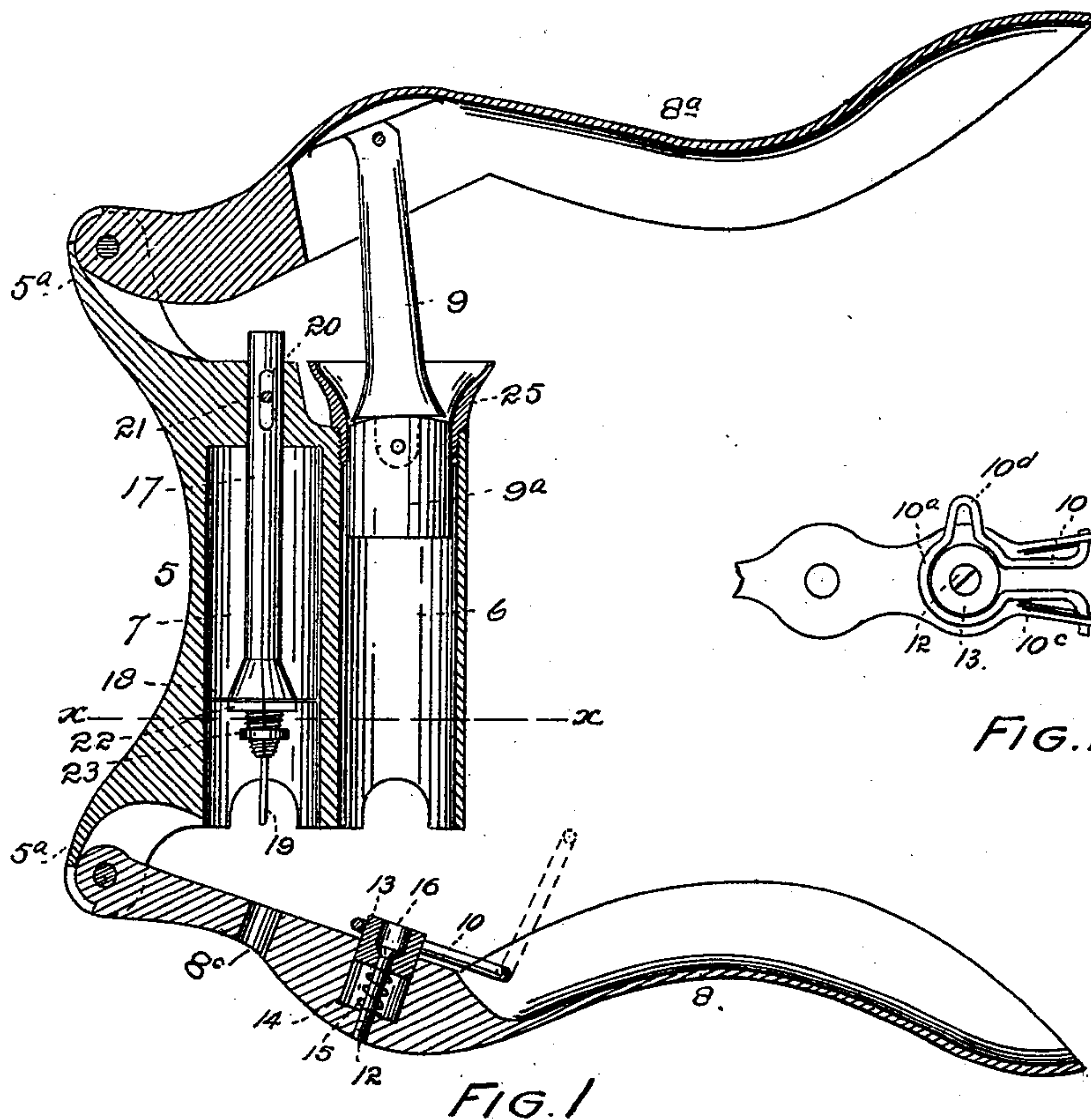


FIG. 2

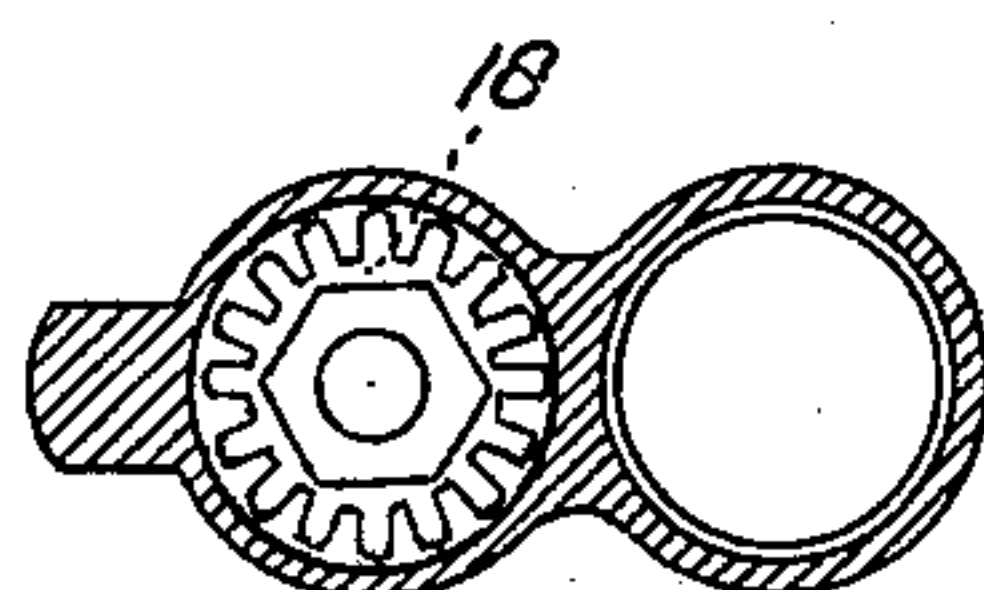


FIG. 3

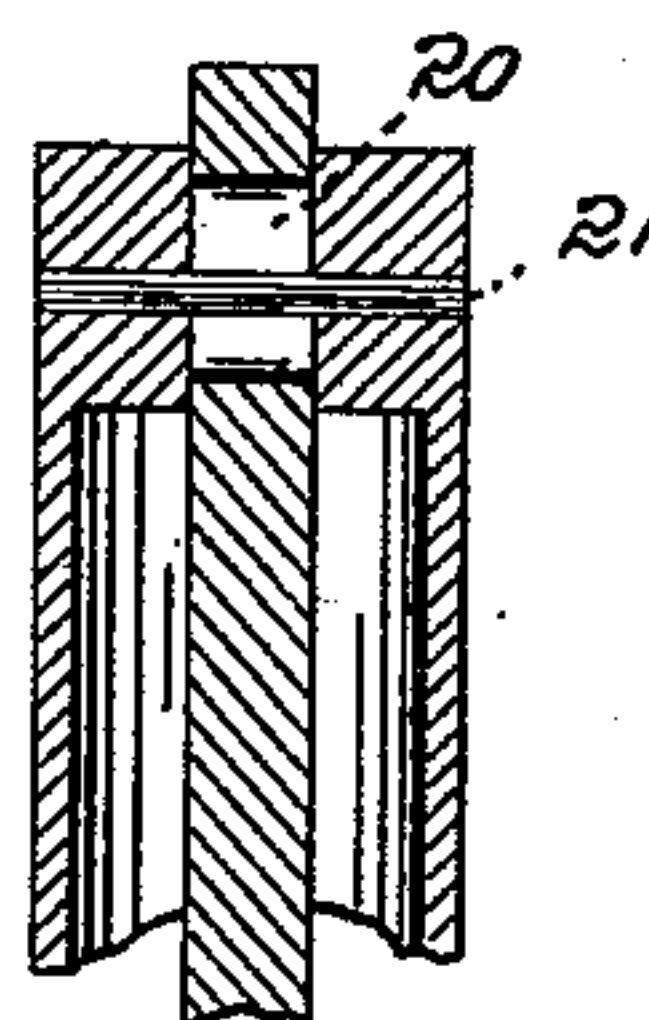


FIG. 4

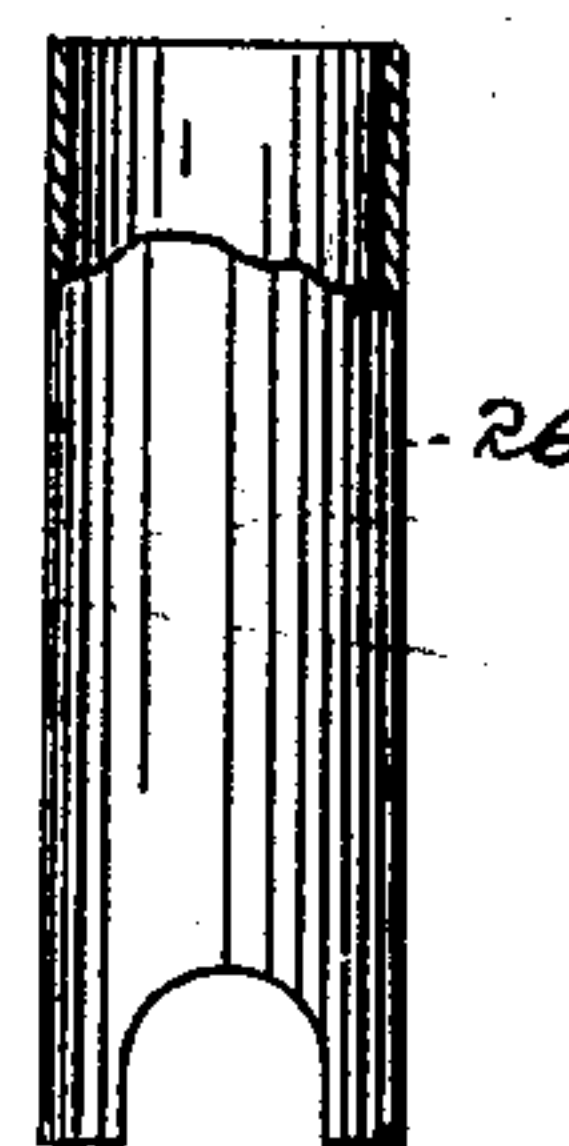


FIG. 5.

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SOLOMON MCNEILL AND OBADIAH H. DENISE, OF BURLINGTON, IOWA.

CARTRIDGE-LOADING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 545,811, dated September 3, 1895.

Application filed May 24, 1895. Serial No. 550,541. (No model.)

To all whom it may concern:

Be it known that we, SOLOMON MCNEILL and OBADIAH H. DENISE, citizens of the United States of America, residing at Burlington, in the county of Des Moines and State of Iowa, have invented certain new and useful Improvements in Cartridge Implements; and we do 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 figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in cartridge implements of the class set forth in United States Letters Patent Nos. 294,865 and No. 335,231, bearing date March 11, 1884, and February 2, 1886, respectively.

The object of our present invention is to still further improve and perfect the devices shown and described in said patents.

Our chief improvements comprise a detachable wad guide or starter, a hinged capper-guard, and a new construction of decapping device, whereby the construction of the implement is greatly simplified, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a longitudinal section taken through the complete implement, the ram rod and the decapping device being shown in elevation. Fig. 2 is a fragmentary view of the lever-handle carrying the capper-guard. Fig. 3 is a cross-section taken on the line $x x$, Fig. 1, looking upward. Fig. 4 is a fragmentary longitudinal section taken through the decapper-shell chamber, the decapping-rod being shown in position. Fig. 5 is an elevation, partly in section, illustrating a false shell which may be inserted in the loading-chamber, whereby the latter is adapted for loading shells too small to fit the normal bore of the chamber.

Similar reference-characters indicating corresponding parts in the views, let the numeral 5 designate the body of the device, containing two cylindrical chambers 6 and 7, the former being the loading-chamber and the latter the decapping-chamber. To ears 5^a formed on the body of the device are hinged

or pivoted the lever-handles 8^a and 8, respectively, the former carrying the hinged ram-rod 9 and the latter the capper and the capper-guard 10. The ram rod is provided with the flexible or self-adjusting piston-head 9^a. The capper comprises the pin 12 and the spring-actuated washer 13, located within a recess 14, formed in the handle 8. The capper-guard 10 is adapted to surround the washer, which is normally made to protrude from its recess by the spring 15, surrounding the pin 12 and engaging the inner surface of the washer 13. When in this protruding position, a small chamber 16 is formed above the pin 12, in which the cap or primer is placed preparatory to its insertion in the shell to be loaded. After the cap has been applied to the shell the guard is employed to prevent the depression of the washer far enough to bring the capper-pin 12 in contact with the cap, for obvious reasons. The guard may therefore be constructed in any suitable manner whereby it is adapted to perform this function. As shown in the drawings, it comprises a wire ring 10^a, having arms 10^b, bent to engage apertures formed in the handle, whereby the device is hinged and adjustable at pleasure. The ring is provided with a projection 10^d, which extends beyond the handle, whereby the device may be easily manipulated by one finger of the hand which grasps the handles. This guard is of course raised to the dotted-line position (see Fig. 1) during the operation of capping. After the cap has been applied the guard is kept in the full-line position (referring to the same figure) during the operation of loading the shell, thus obviating the possibility of exploding the cap while loading. The decapping device comprises a rod 17, a guide-washer 18, and an ejecting-pin 19. The upper portion of this rod engages an aperture formed in the body of the device above the chamber 7, and is provided with a slot 20, through which is passed a pin 21, which supports the rod in place. The slot allows the rod the necessary vertical movement for the performance of its function. The guide-washer engages a shoulder formed on the lower part of the rod 17 and is held in place by a nut 22, engaging its under surface. This washer is scalloped and is adapted to engage the inner wall of the shell inserted in the chamber 6.

The ejecting-pin is inserted in the lower end of the rod and is held in place by a nut 23, engaging the threaded extremity of the rod, which is provided with incisions in the ordinary manner. The wad-guide 25 is screwed into the top of the shell-chamber 6 and forms a shoulder, which the upper extremity of the shell engages when inserted in the chamber in position for loading. This wad-guide is therefore vertically adjustable, whereby the chamber 6 is made to fit shells of different lengths. It is also detachable. Hence wad-guides of different lengths may be inserted in the loading-chamber.

From the foregoing description it is believed that the use of our improved implement will be readily understood. To load a shell, it is first placed in the chamber 6 open end upward, assuming that the implement, as shown in Fig. 1, occupies a vertical position, with the handle 8^a uppermost. The capper-guard is then raised, the cap dropped into recess 16, and the two handles grasped and pressed toward each other. The cap will thus be inserted in the end of the shell. The capper-guard is then dropped to the full-line position (see Fig. 1) and the loading of the shell is completed in the usual manner. When it is desired to decap a shell, the latter is placed in the chamber 7 and the rod 17 raised to the position shown in Fig. 1. The handles are again grasped and pressed toward each other, whereby the rod is forced downward by the upper handle and the cap is removed by the pin 19. The ejected cap drops through an aperture 8^c, formed in the handle 8. The false shell 26 is adapted for insertion in the chambers 6 and 7, whereby said chambers may be sufficiently reduced in size to adapt them for use with shells of less diameter than the bore of the chambers. A single implement may thus be used with shells of different sizes. The washer 18, which is readily detachable, should be made in different sizes, whereby it may be used with shells of various calibers. The washer 18 is made of thin spring metal, whereby it possesses a certain degree of elasticity, to the end that it may fit the shells tightly and yet not offer undue resistance, since the scalloped edge will bend sufficiently to allow the rod to move easily in either direction. The washer thus forms an accurate guide for the decapper-rod and causes the ejecting-pin to properly engage the cap to be removed as the rod is forced downward.

Having thus described our invention, what we claim is—

1. In a cartridge implement, the combination with the body part containing the decapping and loading chambers, the lever handles hinged thereto, the ram-rod hinged to one handle, and the capping device attached to

the other handle, of the decapping device comprising the rod, the guide washer and the ejecting pin, the rod being movably attached to the body of the implement; and the capper guard movably attached to one handle of the implement in suitable proximity to the capping device, substantially as described.

2. In a cartridge implement of the character described, the combination with the capping devices attached to one handle of the implement, of the guard movably attached to said handle in suitable proximity to the decapping devices, substantially as described.

3. In an implement of the character described, the combination with the capping devices comprising a pin and a spring-actuated washer attached to one handle of the implement, of a capper guard hinged to said handle and adapted to surround the capping washer, substantially as described.

4. In a cartridge implement, the combination with the capping devices comprising the spring-actuated washer and the pin attached to one handle of the implement, of the guard comprising a wire ring having a lateral projection, and arms engaging apertures formed in the handle, said guard being adapted to surround the capping washer, substantially as described.

5. In a cartridge implement of the class described, the wad-guide adjustably inserted in the top of the loading chamber, and readily detachable therefrom, as and for the purpose set forth.

6. In a cartridge implement of the class described, the combination with the body of the implement, of the decapping device movably attached thereto and comprising the rod, the guide washer and the ejecting pin, substantially as described.

7. In a cartridge implement of the class described, the combination with the body of the implement having an aperture formed above the decapping chamber, of the decapping device comprising a rod, a guide-washer and an ejecting pin, the upper extremity of the rod being slotted and engaging the aperture formed above the chamber, and a pin passing through the slot in the rod and supporting the latter in operative relation with the body of the implement, substantially as described.

In testimony whereof we affix our signatures in the presence of two witnesses.

SOLOMON MCNEILL.
OBADIAH H. DENISE.

Witnesses for Solomon McNeill:

GEO. C. FLETT,
W. H. FLETT.

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J. C. GREINER,
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