

W. N. BEARDSLEY.

COMBINED CAPPER AND DECAPPER FOR CARTRIDGES.

(Application filed Dec. 6, 1899.)

Fing. 1.

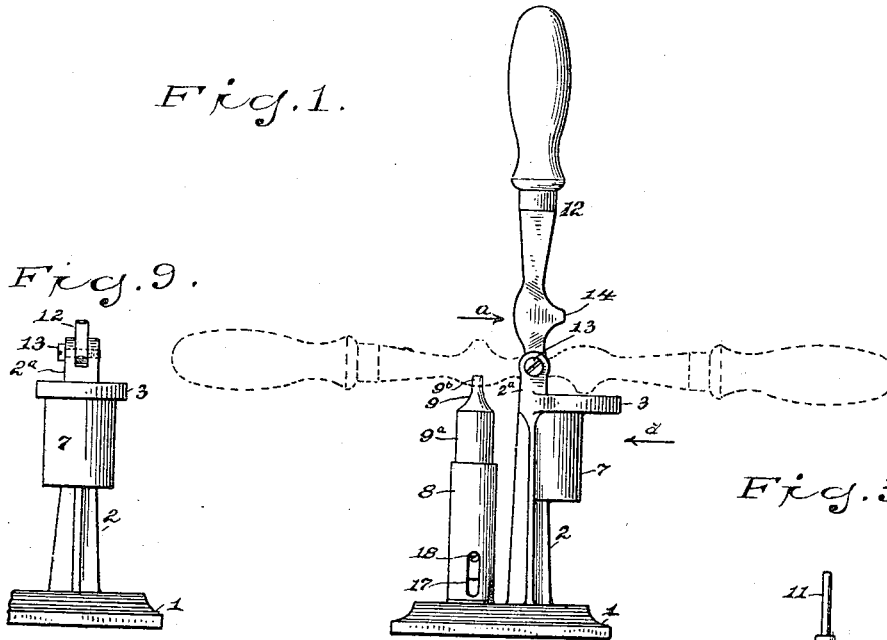


Fig. 9.

Fing. 3.

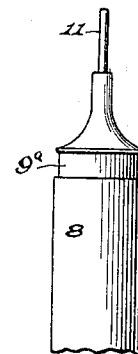


Fig. 2.

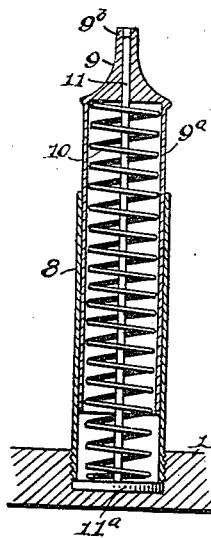


Fig. 4.

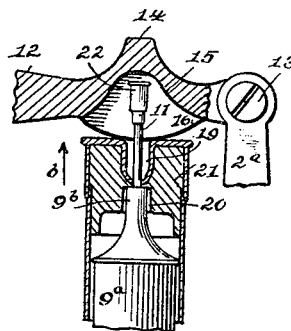
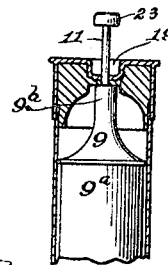


Fig. 5.



Fr. 6.

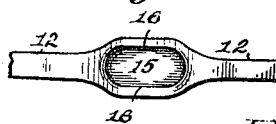


Fig. 7.

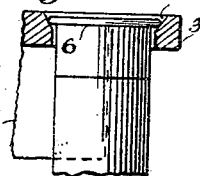
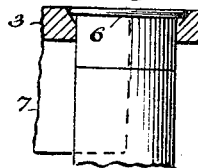


Fig. 8.



WITNESSES

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WILLIAM N. BEARDSLEY, OF BRIDGEPORT, CONNECTICUT.

COMBINED CAPPER AND DECAPPER FOR CARTRIDGES.

SPECIFICATION forming part of Letters Patent No. 647,066, dated April 10, 1900.

Application filed December 6, 1899. Serial No. 739,392. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. BEARDSLEY, a citizen of the United States, and a resident of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in a Combined Capper and Decapper for Cartridges, of which the following is a specification.

My invention relates to an improved cartridge capper and decapper so constructed that its field of operation will cover all the different primers now in use.

To enable others to understand my invention, reference is had to the accompanying drawings, in which—

Figure 1 represents a reduced side elevation of the completed tool with the handle-lever in a vertical position, while the two dotted positions of said lever represent its capping and decapping positions. Fig. 2 is a full-size sectional detail view of the movable anvil and the immovable support therefor, full view of the spring which actuates such movable cartridge-supporting anvil, also full view of the primer-extracting plunger, and broken view of the base-plate. Fig. 3 is a broken detail view of the movable anvil and its support, showing the former depressed, so as to expose the primer-extracting plunger. Fig. 4 is a detail broken sectional view of the movable anvil depressed, broken sectional view of a cartridge mounted thereon and carried down with such anvil, so as to expose the primer-extractor and lift a long primer from its seat, also broken view of the handle-lever, partly in section, and broken view of its supporting-standard. Fig. 5 is a detail broken sectional view of a cartridge-shell adapted to receive a thin primer, also broken cartridge-anvil shown depressed with such primer ejected. Fig. 6 is a broken detail view of the operating-lever looking in the direction of arrow *a* of Fig. 1 and arrow *b* of Fig. 4. Fig. 7 is a detail sectional view of the anvil ring or support for the head of the cartridge when capping the same through line *c* of Fig. 9, showing broken view of a No. 12 cartridge-shell mounted therein. Fig. 8 is a view similar to Fig. 7, showing a No. 10 cartridge-shell mounted therein. Fig. 9 is a view of the tool looking in the direction of arrow *d* of Fig. 1,

also broken view of the lever and supporting-base.

The construction and operation are as follows:

1 represents the base, and 2 the supporting-standard, having the laterally-supporting ring 3 for the head of the cartridge-shell. This ring has (see Fig. 7) the vertical hole 4 there-through to admit the body portion of two or more sizes of cartridge-shells. The taper seat 5 is provided in the upper surface of this ring to support the head portion 6 of the cartridge-shell. As the head, as well as the body of the No. 10 cartridge-shell, (shown at Fig. 8,) is larger than the No. 12 shell, (shown at Fig. 7,) the head of the former will occupy a higher position on the inclined seat 5 than the latter, so that it can readily be seen that both heads can be accommodated on the same seat. It will be observed, too, that the body of the No. 10 shell nearly or quite fills the hole 4 of the ring 3, while the No. 12 shell is allowed considerable space or play. It will thus be readily seen that these features enable several sizes of shell to be capped in the same tool.

7 is a skirt formed integral with the ring or support 3 and the standard to strengthen such ring and support it against downward pressure of the handle in capping, presently to be described.

8 is a tube whose lower end is threaded (see Fig. 2) to fit a threaded hole in the base 1.

9 is the anvil, whose body or tubular portion 9^a is operatively mounted in the tube or shell 8 and is normally elevated by means of the spring 10. A small hole extends through said anvil to freely admit the primer-extracting rod 11, whose head 11^a is held firmly against the bottom of the before-mentioned hole in the base 1 by means of the tube 8, thus keeping said rod rigid and in place.

12 is the handle-lever, pivotally mounted on the screw 13, extending (see Fig. 9) through the forked upper portion 2^a of the standard 2. This lever is provided with the capper projection 14 on one side, and on the other side is provided the recess 15, Figs. 4 and 6. The edges 16 of the side walls of said recess are curved, so as to more readily engage the head of the cartridge-shell, as shown at Fig. 4.

17, Fig. 1, is an elongated slot in the tubu-

lar shell 8 to receive the head of the screw 18, projecting from the body portion 9^a of the anvil, so as to limit the upward movement of said anvil.

5 In capping or priming the cartridge-shell it is dropped into the supporting-ring 3, as shown at Figs. 7 and 8, the head 6 occupying a position on the inclined sides 5, which position is determined by the size of said head, 10 which, as before mentioned, will drop lower down such incline for a No. 12 shell than for a No. 10. The primer is inserted in the recess 19, Figs. 4 and 5, and the handle 12 is then thrown over to the right dotted position, 15 (shown at Fig. 1,) with the projection 14 resting on the top of said primer, and a downward pressure of said handle will force the primer home. This operation applies equally as well with a short as with a long primer. 20 To decap or remove the primer, the cartridge is placed over the anvil 9, as shown at Figs. 4 and 5, and the handle 12 is thrown over to the left dotted position, with the curved edges of the side walls of the recess 15 resting on the upper surface of the head 6 of the 25 cartridge-shell, as shown at Fig. 4. The upper or reduced end 9^b of the anvil will naturally drop into the recess 20, situated on the under side of the reinforce 21 of the cartridge-shell, and thus center said anvil with the 30 cartridge-shell. A downward pressure of the handle-lever 12 will force the anvil down, and thus uncover the primer-extracting rod 11 and eject the primer, as shown. This downward 35 movement will of course need to be greater to extract the long primer 22 (shown at Fig. 4) than will be required for the short primer 23. (Shown at Fig. 5.) The recess 15 in said handle-lever will of necessity be deep enough 40 for any long primer on the market.

It will readily be seen from the foregoing description that my improved capper and decapper has many advantages over those of its class now in use, as these are capable of 45 accommodating but one size of cartridge-shell. In other words, a separate tool is required for each and every size of cartridge-shell and also for each size or length of primer. My improved tool, on the other hand, has a

range of several sizes of cartridge-shell, be- 50 sides extracting primers of any length now in use—an advantage that will be readily appreciated by all sportsmen.

Having thus described my invention, what I claim as new, and desire to secure by Letters 55 Patent, is—

1. The herein-described combined capper and decapper consisting of a base having a standard projecting therefrom and handle-lever pivotally supported thereto, a support- 60 ing-ring projecting from said standard adapted to receive different sizes of cartridge-shells, means on one side of said handle-lever to engage and force in a primer, a depressible anvil and a stationary ejector-pin within the 65 same, said anvil placed in direct line with the center of said supporting-ring so that the handle-lever may be swung between the two, a recess on one side of said lever to admit the ejected primer, substantially as set forth. 70

2. The herein-described decapper consisting of a movable anvil for supporting a cartridge-shell, a support for said anvil, a stationary ejector-pin within said anvil adapted to be exposed when said anvil is depressed, a 75 pivotally-supported handle-lever adapted to be brought into engagement with the upper surface of the head of the cartridge-shell so as to depress the said anvil and carry said shell down therewith, a recess in the face of 80 said handle-lever to admit the ejected primer, for the purpose set forth.

3. The herein-described decapper consisting of a depressible anvil for supporting a cartridge-shell, a support therefor, a stationary 85 ejector-pin within said anvil adapted to be exposed when said anvil is depressed, a spring to carry such anvil back to its normal elevated position when pressure is removed, for the purpose set forth. 90

Signed at Bridgeport, in the county of Fairfield and State of Connecticut, this 1st day of October, A. D. 1899.

WILLIAM N. BEARDSLEY.

Witnesses:

DAVID M. LACKIE,
I. W. DAY.