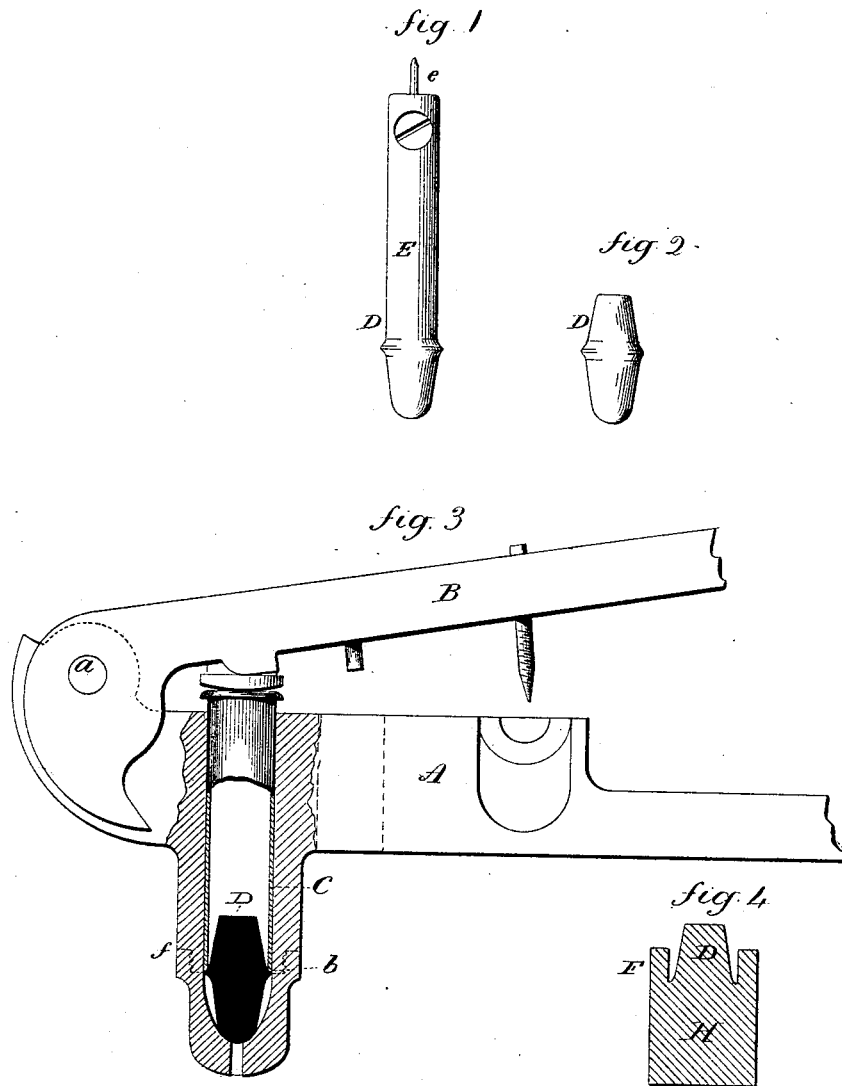


(No Model.)

J. H. BARLOW.
CARTRIDGE RELOADING TOOL.

No. 267,130.

Patented Nov. 7, 1882.



Witnesses.
J. H. Shumway
Jos. C. Earle

John H. Barlow
Inventor
By atty.
Wm. Earle

UNITED STATES PATENT OFFICE.

JOHN H. BARLOW, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE
WINCHESTER REPEATING ARMS COMPANY, OF SAME PLACE.

CARTRIDGE-RELOADING TOOL.

SPECIFICATION forming part of Letters Patent No. 267,130, dated November 7, 1882.

Application filed May 19, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. BARLOW, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Cartridge-Reloading Tools; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, the former as made a part of the primer-ejector; Fig. 2, the former without the primer-ejector; Fig. 3, a loading-tool with the former as in operation; Fig. 4, a modification.

This invention relates to an improvement in the instrument used for reloading cartridges. These instruments consist of a pair of levers, A B, hinged together, as at *a*, the one, A, provided with a cavity, C, corresponding to the complete charged cartridge—that is, a cartridge loaded and with the ball inserted—and so that when the ball is introduced into the shell and placed in the cavity C the other lever, B, is brought down upon the head of the shell, driving it into the cavity, and so as to crimp or turn the mouth of the shell onto the conical surface or portion of the ball. This instrument is too well known to require further description. In the discharge of the ball from the shell it does not straighten the edge which was crimped over the surface of the ball. Hence it is necessary, before reloading can be perfectly done, to reopen the mouth of the shell. If this is not done, the surface of the ball will be more or less cut as the shell is being forced onto it, thus making a defective ball.

The object of my invention is principally to provide a reloading-tool with means for reopening or straightening the mouth of the shell; but my invention may be used independent of a reloading-tool; and it consists in a recess or cavity, the diameter and shape corresponding substantially to the exterior of the shell, open at one end for the insertion of the shell, and provided at the other end with a conical or tapering former projecting into the cavity, and so that a shell whose mouth has been contracted may be introduced into said cavity and then forced upon the said former will cause the

mouth or open end of the cartridge to be reshaped, as more fully hereinafter described.

D, Fig. 2, represents the former for opening the mouth of those shells which have not a center perforation in the cap-seat, and fitted for introduction into the cavity C of the reloading-tool. Its lower portion is shaped so as to set into the lower part of the cavity and takes its seat where the point of the ball naturally rests, its larger diameter corresponding substantially to the diameter of the cavity, as seen in Fig. 3. Above the larger diameter *b* the former is conical or gradually contracted from the point where the mouth of the shell is to rest to a diameter less than the internal diameter of the shell. The former is first introduced, as seen in Fig. 3. Then the shell to be opened is placed into the cavity and the lever brought down upon it to force it onto the former, the conical shape serving to turn the edge of the shell outward, as seen in Fig. 3. In case of center-pierced cap-seat, the former may be used as a part of a primer-ejector. In that case it is extended above the larger diameter to nearly the length of the shell, as at E, Fig. 1, its upper end provided with a pin, *e*, to enter the center perforation in the cap-seat. In this case the former is introduced into the cavity in the same manner as before and the shell placed over it, the pin *e* entering the hole in the cap-seat. When the lever B is brought down the primer will be thrown off by the pin *e*, while the mouth will be opened on the former below.

Instead of introducing the former from the top downward, the instrument may be constructed with its lower or ball-receiving portion removable, as indicated at *f* in broken lines, Fig. 3, and so that in loading cartridges a tip will be placed on the cavity portion corresponding to the ball. Then in reopening the shell the ball-tip will be removed and a tip having the former made as a part of it set in its place.

In some cases, in preparing the shell for reloading, it may be desirable to use the former for opening the mouth as an independent instrument. In that case I construct the former D with a flange, F, around its larger diameter, and substantially parallel with its axis, as seen in Fig. 4, and so as to form a base, H. The in-

ternal diameter of the flange F corresponds substantially to the external diameter of the shell—that is, to the cavity in the reloading-tool. In the use of this instrument the cartridge is set on a suitable support, head downward, and the former pressed into its mouth, as seen in Fig. 4, or vice versa. I do not wish to be understood, therefore, as confining my invention to the employment of the former in a reloading-tool.

I claim—

1. The herein-described improvement in cartridge-reloading tools, consisting of a former arranged in a cavity in diameter corresponding substantially to the external diameter of the shell, the said former conical or gradually contracted from the base of the cavity or point where the mouth of the shell rests, and so as to enter the mouth of the shell, substantially as and for the purpose described.

2. In a cartridge-reloading tool consisting of a cavity to receive the mouth end of the shell,

and means for forcing the shell into said cavity, the combination therewith of a removable former constructed to be set into the cavity, and conical or gradually contracted from the base or bottom where the mouth rests, and so as to enter the shell forced therein and open the mouth, substantially as described.

3. In a cartridge-reloading tool consisting of a cavity, its lower end shaped corresponding to the ball end of the cartridge, and means for forcing the shell into said cavity, a former constructed to fit the ball portion of said cavity and removable therefrom, its upper portion conical or gradually contracted from the base or point where the mouth of the shell rests, and so as to expand the mouth of the shell when forced onto said former, substantially as described.

JOHN H. BARLOW.

Witnesses:

A. W. HOOPER,
T. G. BENNETT.