(No Model.)

M. WHEELER.

RELOADING AND RESIZING TOOL.

No. 358,238. Patented Feb. 22, 1887.

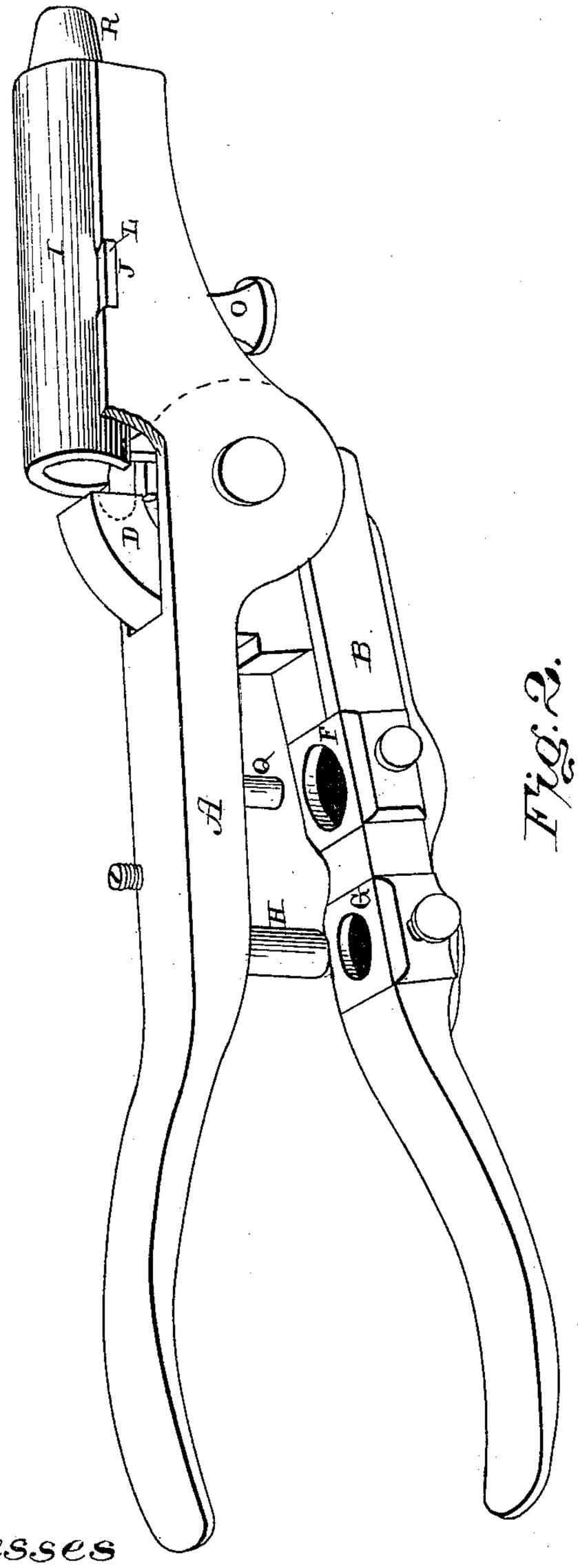

Fig. 1.

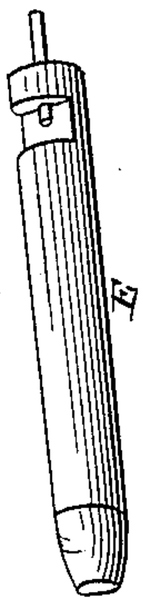

Fig. 4.

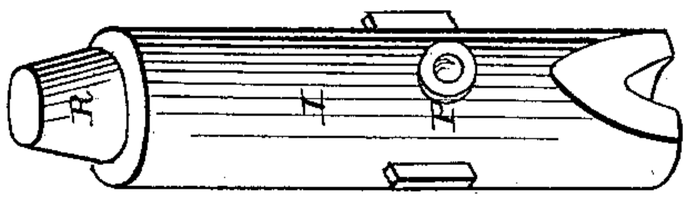

Fig. 2.

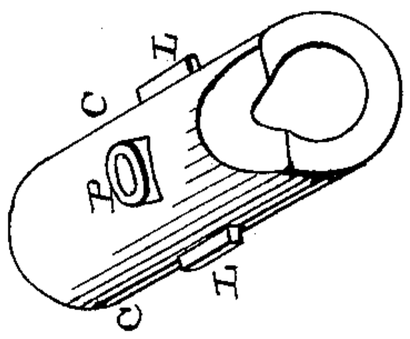

Fig. 3.

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UNITED STATES PATENT OFFICE.

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RELOADING AND RESIZING TOOL.

SPECIFICATION forming part of Letters Patent No. 358,238, dated February 22, 1887.

Application filed September 30, 1886. Serial No. 214,956. (No model.)

To all whom it may concern:

Be it known that I, MARSHAL WHEELER, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Reloading and Resizing Tools; and I 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 pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in reloading and resizing tools for cartridge-shells; and it consists in, first, a tool which is adapted to alternately receive resizing and reloading chambers; second, chambers for resizing or reloading shells, which are provided with screw-threaded sockets and suitable lateral projections, in combination with a tool which is provided with a socket to receive the chambers, and a screw for holding them in position in the socket; third, in the arrangement and combination of parts, which will be more fully described hereinafter.

The object of my invention is to provide a tool for resizing and reloading different sizes of discharged cartridge-shells, and which tool is adapted to alternately receive chambers of different sizes in which the cartridge-shells of different sizes are forced, so as to resize them, and chambers in which the cartridges are to be decapped and reloaded, thus enabling to be done with a single tool and two sets of chambers what it has required heretofore several tools to perform and a separate tool for each size of shell.

Figure 1 is a perspective view of a tool to which my invention is applied, a loading-chamber being shown in position. Fig. 2 is a perspective of the loading-chamber. Fig. 3 is a perspective of one of the resizing-chambers. Fig. 4 is a perspective of the decapper.

A B represent the two jaws of the tool, which are pivoted together in the usual manner. The jaw B is provided with a curved part, D, which extends up through a suitable opening in the jaw A, and which bears against the end of the shell for the purpose of forcing it into one of the chambers, and is an anvil against which the shell bears while the caps are being removed. In the end of this part D is formed a recess into which the cap is forced. Upon this part D is also formed a cartridge-extractor in the usual manner. Through the handle B is also formed an opening through which bullets of different sizes are to be forced, and over which opening is placed the removable perforated plate G, which is held in position by a suitable screw, and which has a perforation of suitable size through it, so as to accommodate the size of bullet being used. The plate G is removable from the handle at any time, and can be replaced by another having a different-sized opening. The handle A is provided with a projection, H, which forces the bullets through the openings when the handles are closed. By means of this construction bullets of different sizes can be given the exact size required.

In the top of the front end of the chamber A is formed a longitudinal groove or recess, which is designed to receive the resizing and reloading chambers, which are of the same external diameter; also formed in the top of this portion of the jaw are suitable recesses, J, which extend at an angle to the recess or groove, and in which the projections L of the chambers catch. Passing up through this end of the handle A is the screw O, which has its upper end screwed into the screw-threaded sockets P in the chambers, and thus holds them rigidly in position.

Two sets of chambers are designed to be alternately used with this tool, according as the shells are being resized or reloaded.

When the shells are to be resized, a chamber, C, (shown in Fig. 3,) is placed in position upon the end of the tool, and is secured rigidly in position by means of the screw O. The projections L upon this chamber fit in the recesses J, and thus prevent any undue strain being brought upon the screw O. The handles of the tool are opened sufficiently far to move the part D down out of the way, and then the cartridge-shell which is to be resized is forced into the end of the chamber C until the part D will strike against its end when the tool is being closed. As the tool is being closed, the part D forces the shell into the chamber, which contracts the shell, so as to reduce it to its original size. The chambers C

are open at both ends alike, and are cut away upon their lower inner ends, so as to allow the cartridge-extractor to catch against the flange upon the shell and withdraw it as the tool is being opened. The chambers C will be made of different sizes, so as to accommodate the different-sized shells which are made. No matter what the internal bore of the chambers may be, they are of the same external size, so that any size that may be desired can be applied to and used in connection with a single tool. After the shells have been resized the chamber C is removed and a reloading chamber, I, is substituted for it.

A series of chambers I are made for each tool, just as there is a series of chambers C, and these chambers differ from each other only in having their outer ends closed, as shown in Figs. 1 and 2. After the reloading-chamber I has been fastened upon the jaw A, by means of the screw O, a decapping-tool, E, is placed in the chamber and then the shells are forced into the chamber over the decapper, so that the projection upon its outer end will pass through the opening in the shell, and force the discharged cap off into the recess in the end of the part D. After the shells have been decapped a new cap is placed upon their ends, and then the shell is passed through the opening in the plate F and the handle is closed, so as to force the projection Q down upon the end of the cap or fuse and then force it into position in the shell. The plate F, through which the shell is placed to be recapped, is also held in position by means of a screw, and is made detachable, so that plates having holes of different sizes can be used. After the shell has been recapped its end may be slightly opened or expanded by forcing it upon the cone R, which is formed upon the end of the reloading-chamber I. After the powder has been poured into the shell the butt-end of the bullet is inserted into the end of the shell, and then the shell is placed into the chamber I, and the tool is closed, so as to force the part D against the breech end of the cartridge, and thus force the bullet in position and contract the end of the shell around it.

By means of the construction here shown and described it will be seen that the resizing and reloading chambers are made interchangeable, and that different sizes of chambers may be used, according to the size of the shell that is being operated upon. These chambers C I being interchangeable, only a single tool is used.

With each tool will go a series of chambers, C I, of different internal diameters, so that any size cartridge in use may be operated upon with equal facility.

Having thus described my invention, I claim—

1. In a reloading and resizing tool, the jaw A, having its shorter end extended a suitable distance beyond the pivot, and having this extended end grooved upon its top to receive a chamber, in combination with the jaw B, pivoted to the one A, and having a projection upon its inner end, which projects through an opening in the jaw A, so as to act upon the shell inserted into said chamber, substantially as shown.

2. In a reloading and resizing tool, the jaw A, having its shorter end extended a suitable distance beyond the pivot, a removable chamber placed upon this extended end, and a device for fastening the chamber in place, with the jaw B, pivoted upon the one A, and provided with the projection D, which extends through an opening in the jaw A, for operating upon the shell placed in the chamber, substantially as described.

3. In a reloading-tool, the jaw A, having its inner end extended beyond the pivot, and provided with a longitudinal socket to receive a chamber and the recesses J, with the jaw B, having an extension on its inner end to act upon the shell placed in the chamber, a chamber placed in the socket and provided with projections L, and a screw for securing the shell in position, substantially as set forth.

4. In a reloading-tool, the combination of the two jaws A B, which are pivoted together, with a projection which is secured to the inner side of the jaw A, and a removable perforated plate which is attached to the jaw B, over an opening made through it, and which removble plate acts in connection with the projection upon the jaw A when the two jaws are closed together, substantially as specified.

In testimony whereof I affix my signature, in presence of two witnesses, at Boston, Massachusetts, this 1st day of September, 1886.

MARSHAL WHEELER.

Witnesses:
F. A. JONES,
FRED. A. DUTTON.