

(No Model.)

H. W. HARRINGTON.
Cartridge Capping and Uncapping Tool.

No. 232,028.

Patented Sept. 7, 1880.

Fig. 1.

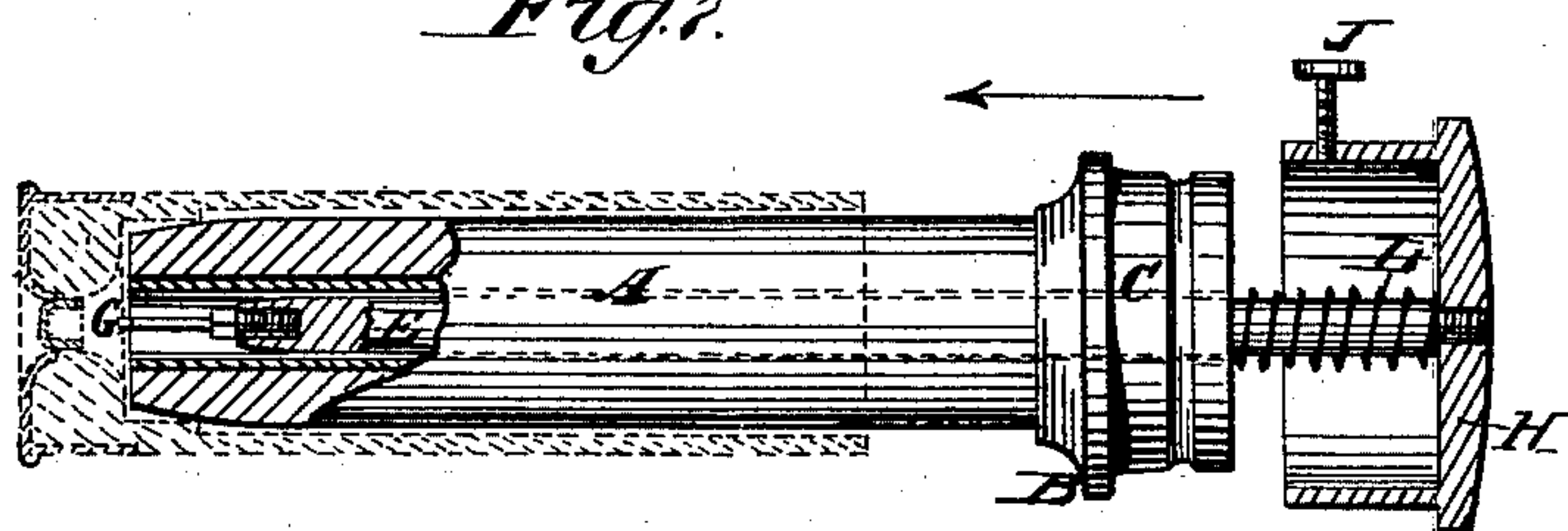
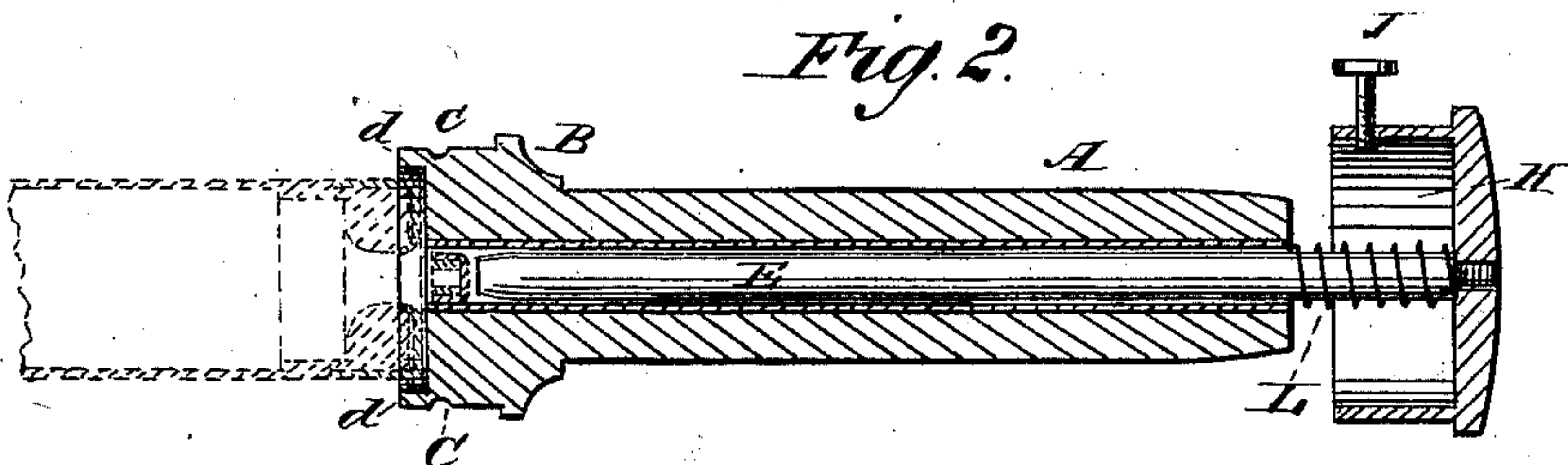


Fig. 2.



WITNESSES:

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CARTRIDGE CAPPING AND UNCAPPING TOOL.

SPECIFICATION forming part of Letters Patent No. 232,028, dated September 7, 1880.

Application filed March 29, 1880. (No model.)

To all whom it may concern:

Be it known that I, HEBER WILLIAM HARRINGTON, of Fort Dodge, in the county of Webster and State of Iowa, have invented a new and useful Improvement in Tools for Capping and Recapping Cartridge-Shells, of which the following is a specification.

My invention relates to a device which is more particularly intended for removing old caps from and inserting new caps in cartridge-shells which have been exploded; but it is also adapted to be used in capping new shells.

The invention consists in a novel construction and combination of a tubular plug and a punch or piston working therein, the details of which are hereinafter particularly described and set forth.

In the accompanying drawings, Figure 1 is a central longitudinal section of the tool when in position for removing the cap from an old shell. Fig. 2 is another central longitudinal section, showing the tool in position for inserting a new cap.

In both figures the shell is represented in dotted lines, and similar letters of reference indicate corresponding parts.

A represents a plug of a diameter corresponding with the interior of the shell in which it is to be used, one end of the plug being very slightly tapered, sufficiently to enable it to fit the interior of the base of the shell. At the other end of the plug is a head, B, on the periphery of which is a groove, C. The top of the head B is countersunk, so as to form a saucer exactly fitting the flanged head of the cartridge-shell, with a cylindrical flange or rim, *d*, surrounding said saucer.

The plug A is bored centrally from end to end, and in this bore works a rod, E, at one end of which is a screw-threaded socket for the reception of a screw-threaded shouldered pin, G. At the other end of the rod E is a cap, H, which fits over the head B of the plug A, and is provided with a set-screw, J, for engagement with the groove C. A spring, L, surrounds the portion of the rod E nearest the cap.

When the tool is used for removing caps it is arranged as shown in Fig. 1. The pin G is inserted in place in the front end of rod E, which is then passed through the plug A, so that the cap H will nearly reach the head B. The tool is then inserted in the shell, which is held in the left hand, and the cap is ejected by the pin G by striking the cap H a slight blow with the right hand.

When the tool is used for inserting new caps it is arranged as shown in Fig. 2. The pin G is removed and the rod E is passed through the plug A from its point toward its head. The cap to be inserted is placed in the end of the bore of the plug, the flanged head of the shell is placed in the saucer surrounded by the rim *d*, and the cap is driven into place by pressure applied to the cap H. The spring L retracts the rod E when pressure is removed from the cap H. The pin G having been removed, the socket in the end of the rod comes opposite the center of the cap, and thus prevents explosion or injury to the fulminate. The saucer and rim *d* fit the flanged head nicely and prevent it from being battered or injured, and also have a tendency to smooth out any bruises which may exist thereon.

The tool thus described is adapted to be used as a cap-extractor, cap-insertor, and loader or wad-driver. When used for the last-named purpose the cap H is secured to the head B by the engagement of the screw J with the groove D.

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

The combination of the tubular grooved plug A C, tapered at one end and having head B at the other, the spring-held rod E, screw-threaded at one end and having threaded socket at the other, the clip H, receiving said threaded end, the screw J, and the screw-threaded shouldered pin G, as shown and described.

HEBER WILLIAM HARRINGTON.

Witnesses:

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