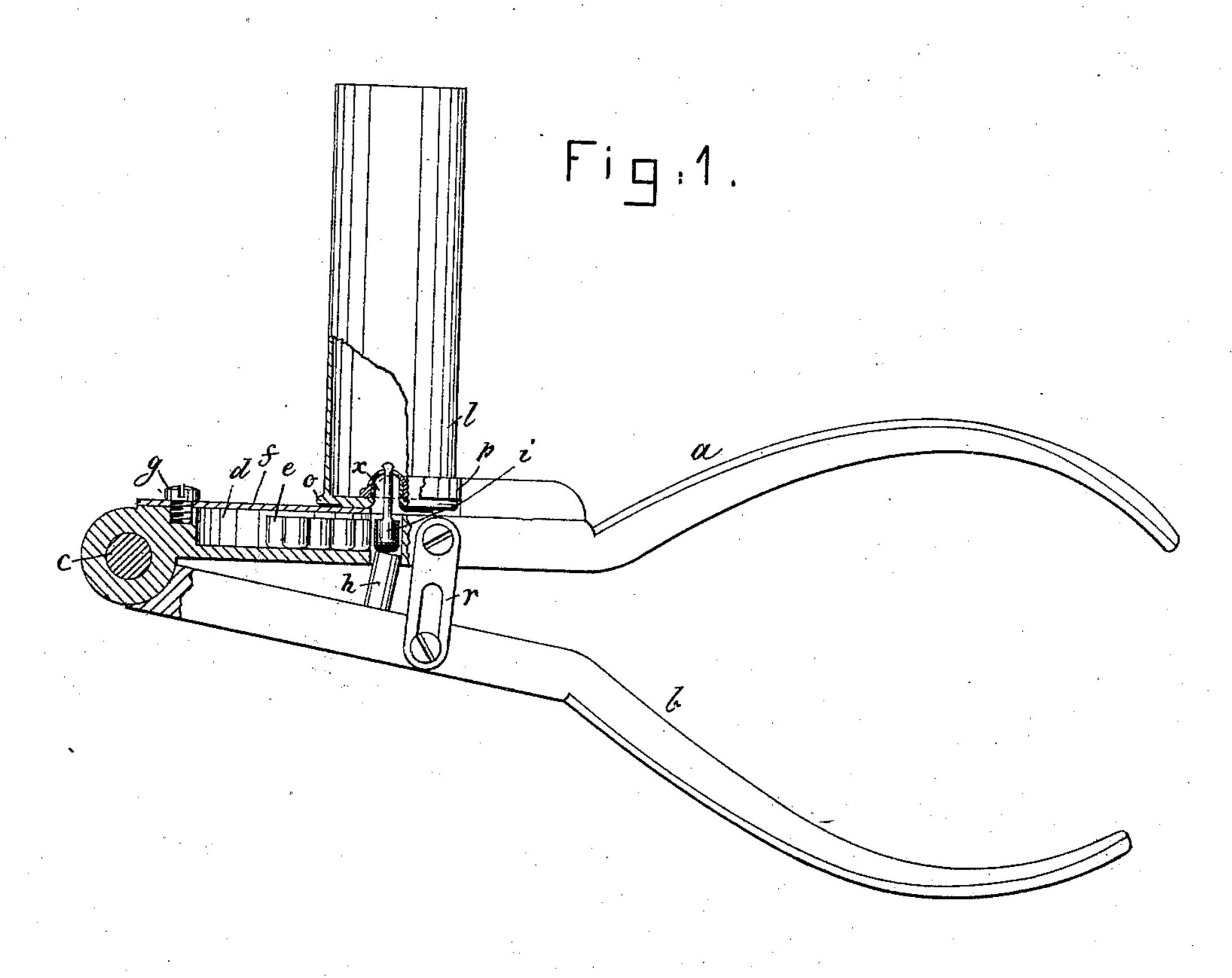
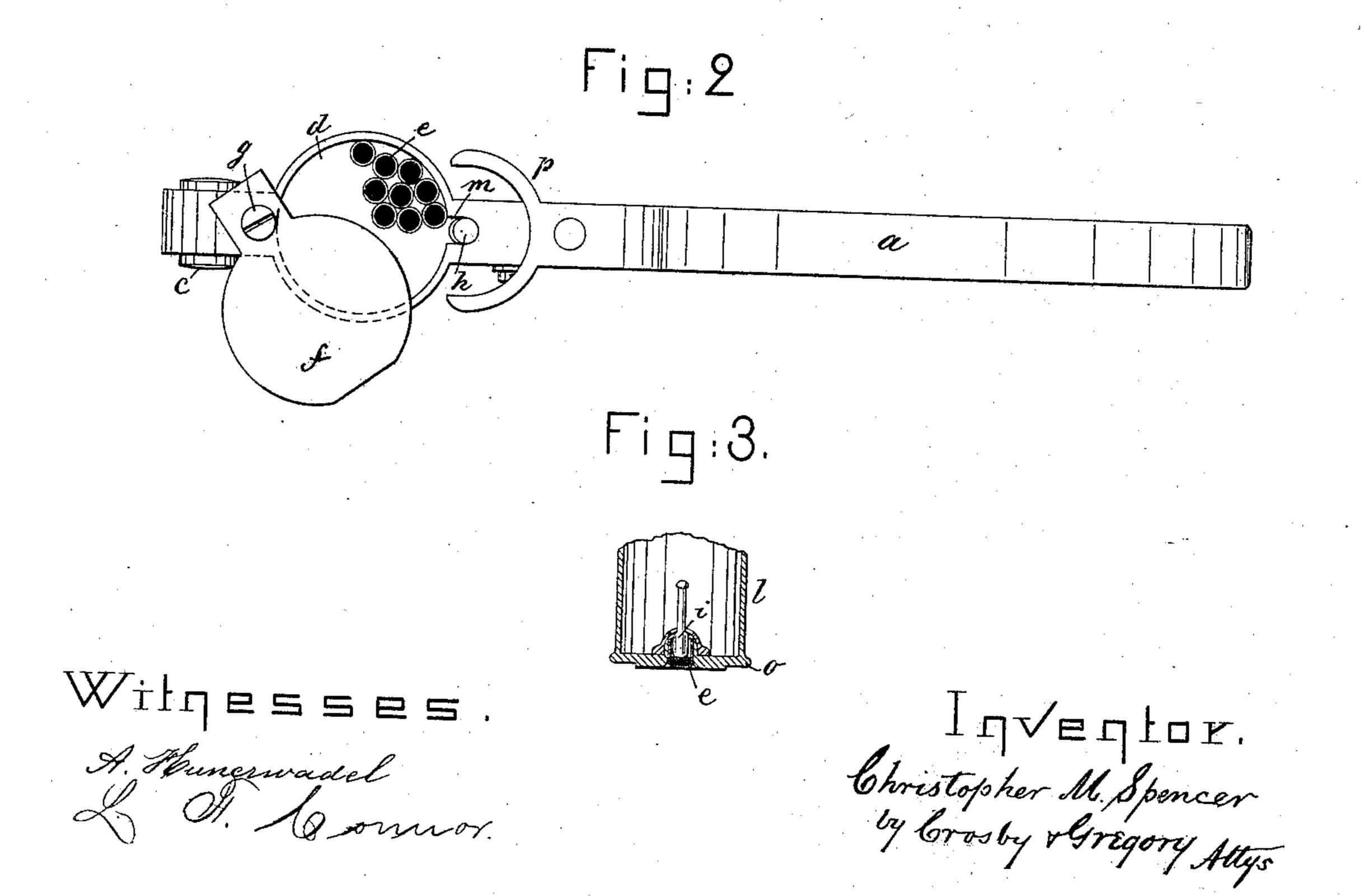
## C. M. SPENCER. Cartridge-Capping Implement.

No. 222,162.

Patented Dec. 2, 1879.





## UNITED STATES PATENT OFFICE.

CHRISTOPHER M. SPENCER, OF HARTFORD, CONNECTICUT.

## IMPROVEMENT IN CARTRIDGE-CAPPING IMPLEMENTS.

Specification forming part of Letters Patent No. 222,162, dated December 2, 1879; application filed September 24, 1879.

To all whom it may concern:

Be it known that I, Christopher M. Spencer, of Hartford, county of Hartford, State of Connecticut, have invented an Improvement in Cartridge-Shell-Capping Implements, of which the following description, in connection with the accompanying drawings, is a specification.

This invention relates to a device or apparatus for capping cartridge-shells, the object of my invention being the production of a simple, cheap, and effective apparatus more especially adapted to recap shells once used, to adapt them to be refired, such an apparatus being a needed auxiliary to a sportsman's or marksman's outfit.

This my invention consists, chiefly, in the combination, with a cap-receptacle and shell holder or gage, of a punch to transfer the cap from the delivering-space of the receptacle upon the anvil of the shell, substantially as hereinafter set forth.

The apparatus is also adapted to cap shells in factories.

Figure 1 represents, in side elevation, one of my capping devices with a shell in position to be capped, the cap-receptacle and part of the shell being shown in section. Fig. 2 is a top view of the capping device, the cover of the cap - receptacle being turned partially aside; and Fig. 3 shows a shell capped.

The arms or levers ab of the capping device are jointed at c. The upper lever or arm is provided with a cap-receptacle, d, to contain the caps e, and a cover, f, pivoted at g, retains the caps in the said receptacle.

The punch h, to drive the caps from the receptacle d into the priming or cap receiving recess x in the head o of the shell, and upon or about the anvil i of the cartridge-shell l, is connected with the lower arm, b, and is adapted, as the arms a b are brought together, to enter an opening (see Fig. 1) in the arm a, act upon the head of a cap held in the delivering-orifice m communicating with and leading out from the cap-receptacle, as in Fig. 2, and force the cap up or out from the said delivering-orifice into the recess x, and upon the anvil i, the

cap, when forced or set into the said recess about the said anvil, having its head or outer face substantially flush with the face of the head of the cartridge, as in Fig. 3.

The anvil i, adapted to be moved longitudinally outward by a blow from within the shell, will, when struck at its innerend, force an exploded cap out of the recess x, preparatory to recapping and reloading the said shell.

To cap the shell it is necessary that the recess x and anvil be centered and held in the proper position with relation to the punch, and in order to do this I have added to the upper arm, a, a gage or shell holder, p, herein shown, as an overhanging curved block adapted to receive and partially surround the shell near the flange or rim of the head, and to act above the said flange, so as to hold the shell and head in opposition to the movement of the punch.

The link r, slotted and pivoted as shown, prevents the arms from being moved so far apart as to completely remove the punch from the delivering-orifice, for in that event the caps would drop out from the said orifice.

Î claim—

1. A cartridge-capping machine composed of hinged jaws or levers *a b*, carrying, respectively, a cartridge-shell holder and cap holding and feeding receptacle, and a punch or plunger, to operate substantially as shown and described.

2. A cartridge-capping machine composed of two pivoted levers, one having a covered cap holding and feeding recess, and means for holding the cartridge-shell in position over the cap-outlet, and the other having a plunger or punch adapted to force the cap from its receptacle into the cartridge-shell, in combination with a connecting-link, substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHRISTOPHER M. SPENCER.

Witnesses:

G. W. GREGORY, N. E. WHITNEY.