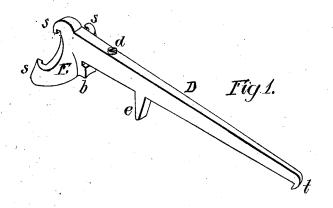
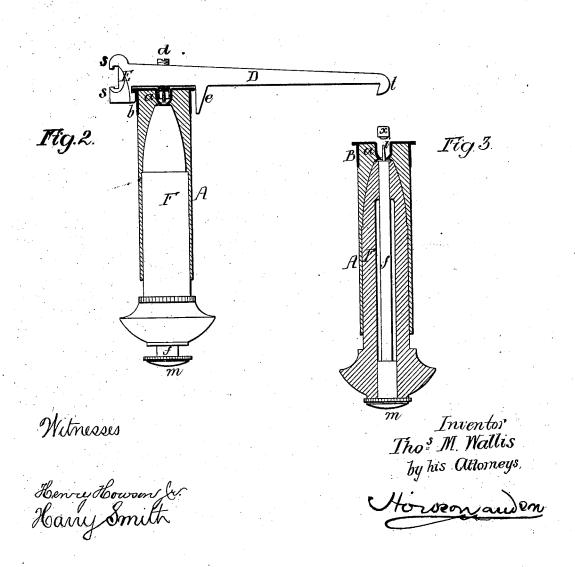
T. M. WALLIS.
Cartridge-Capping Implement.

No. 199,600.

Patented Jan. 22, 1878.





## UNITED STATES PATENT OFFICE.

THOMAS M. WALLIS, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN CARTRIDGE-CAPPING IMPLEMENTS.

Specification forming part of Letters Patent No. 199,600, dated January 22, 1878; application filed November 26, 1877.

To all whom it may concern:

Be it known that I, THOMAS M. WALLIS, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Devices for Applying Caps to Cartridges, of which the following is a specification:

The object of my invention is to readily apply caps to cartridge-cases—an object which I attain in the following manner, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the device for applying a cap to a cartridge; Fig. 2, a sectional view illustrating the operation of the device, and Fig. 3 a sectional view of the supporting-block.

The cartridge in connection with which my invention is intended to be used consists of a shell, A, usually of paper, with a metallic head, B, having a central recess, a, to which the cap is adapted. The device for applying this cap consists of an arm, D, near one end of which, and on the under side of the arm, is a hook, b, which, in the present instance, is formed by a lug projecting from the rear of an enlarged head, E.

Extending vertically through the arm D is a set-screw, d, which can be so adjusted that its lower end may be made to project more or less from the under side of the arm, as desired

Projecting from the arm D is a finger, e, which is arranged at such a distance from the hook b that the head B of the cartridge will fit snugly between the two.

F is a metal block, so shaped as to fit accurately to the interior of the cartridge-case, and this block is made tubular for the reception of a rod, f, which is provided at the upper end with a pin, i, and at the lower end with a head, m, the rod being arranged to slide longitudinally in the block F, for a purpose explained hereinafter.

In applying a new cap to a cartridge by the aid of the above devices, the block F, having the rod f withdrawn, as in Fig. 2, is first inserted into the cartridge A, so as to form an anvil, on which the cartridge rests solidly, and which will resist any pressure which may be exerted upon its head B. A sharp blow is then struck on the head m of the rod f, so as

to cause the pin i to strike the central partition of the old cap, and force the latter from its seat in the head of the cartridge. A new cap, x, is then applied to the depression in the center of the head B, and the hook b of the arm D adapted to the rim of said head, so that the arm forms a lever having its fulcrum at the said rim.

On depressing the outer end of the arm the bottom of the screw d comes into contact with the head of the cap and forces the same down into the recess.

The finger e serves to prevent the hook b from slipping off the rim during the pressing operation.

When the cap is pressed down into the recess its central partition strikes the end of the pin i and forces the rod f outward.

The head E on the arm D has jaws s, which are adapted to the rim of a cartridge, in order to withdraw it from a gun-barrel when it has a tendency to stick, and the outer end of the arm D has a hook, t, for acting on the front edge of the cartridge-shell in case the head of the cartridge has been blown or pulled off.

It is not necessary that the hook b should be applied directly to the rim of the cartridgehead, as it may be adapted to the rim of a frame in which the cartridge rests, or to any projection adjacent to the said head.

I claim as my invention—

- 1. The within-described device for applying a cap to a cartridge, said device consisting of an arm, D, having on the under side a hook, b, adapted to the rim of a cartridge, or to a projection adjacent to the same, all as specified.
- 2. The within-described implement, consisting of the arm D, a hook, b, and finger e, all as set forth.
- 3. The within-described implement, consisting of an arm, D, having a hook, b, a head, E, with jaws s, and a hook, t, as specified.

  In testimony whereof I have signed my

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

T. M. WALLIS.

Witnesses:

RICHARD L. GARDINER, HARRY SMITH.