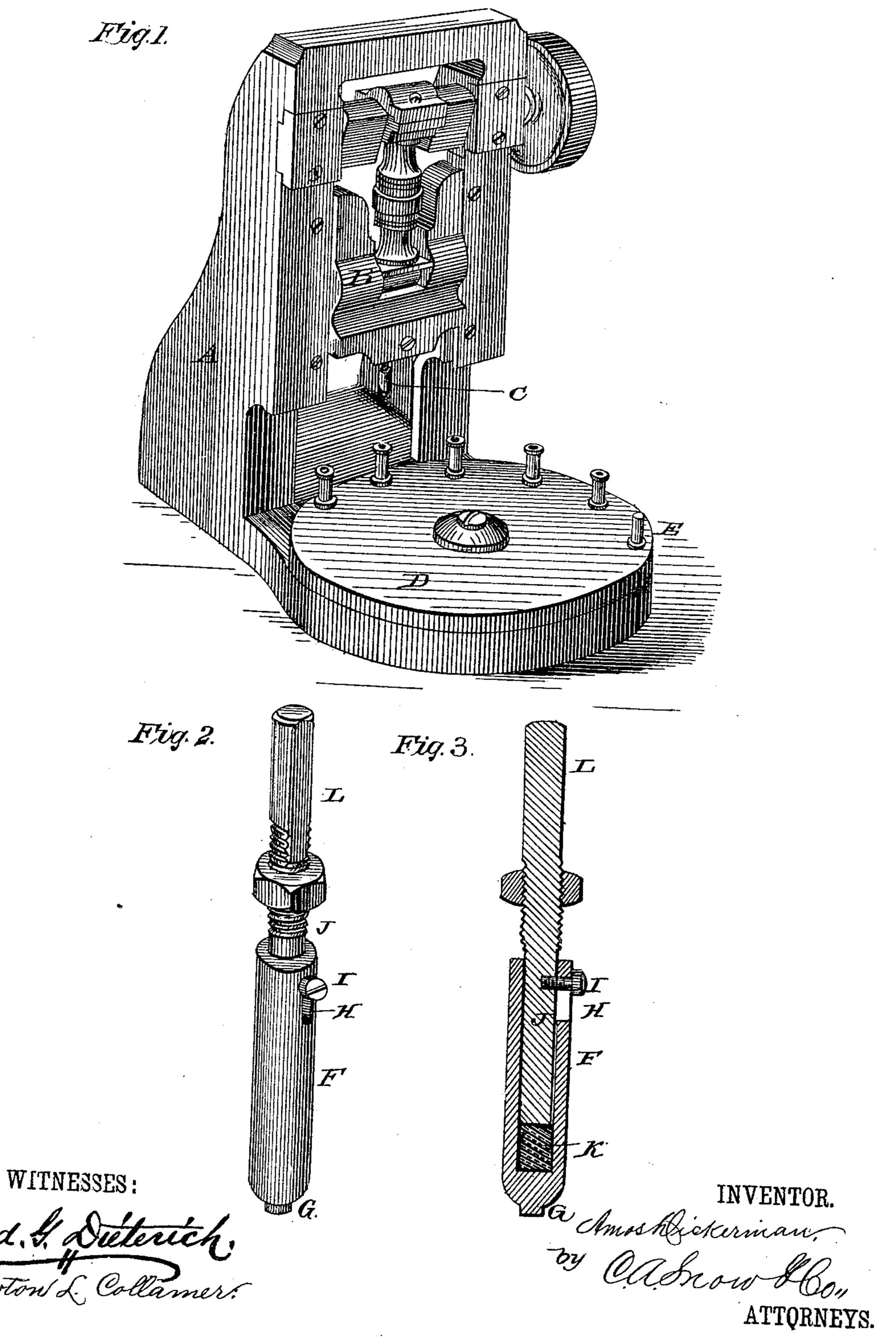
(No Model.)

## A. DICKERMAN.

MACHINE FOR SETTING PRIMERS IN CARTRIDGE SHELLS.
No. 270,288.

Patented Jan. 9, 1883.



## United States Patent Office.

AMOS DICKERMAN, OF NEW HAVEN, CONNECTICUT.

## MACHINE FOR SETTING PRIMERS IN CARTRIDGE-SHELLS.

SPECIFICATION forming part of Letters Patent No. 270,288, dated January 9, 1883.

Application filed June 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, Amos Dickerman, of New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Devices for Setting Primers in Cartridge-Shells; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to devices for setting primers in metallic or metal-headed cartridges; and it consists in a peculiarly-constructed punch operated by suitable mechanism, by which the priming shall, by a single operation of the punch, be gradually but firmly forced into the cavity or "pocket" formed in the shell, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, Figure 1 is a view of the machine to which my improvement is attached. Fig. 2 is a view of my improved punch detached from the machine, and Fig. 3 is a sectional view of the said punch.

Corresponding parts in the several figures are denoted by like letters of reference.

30 Asis well known, metallic and metal-headed cartridges are now made with a primer seated in a pocket formed in the external surface of the head of the shell, and as this primer is required to be so fitted as to render the joint 35 between it and the walls and the pocket gastight, it must be forced or crowded into the pocket as tightly as possible without crushing it. This has heretofore been done by a single ordinary punch or presser, which has latterly 40 been combined with a secondary punch operated gradually by peculiar mechanism. The single punch has proved defective, owing to its liability to explode the primings by the sudden and forcible concussion, and the latter 45 device is objectionable from its complicated nature, which makes it liable not to operate with the requisite precision.

The machine to which my invention is applied is shown in Fig. 1 of the drawings. In the machine itself no novelty is claimed. It consists of a frame, A, having a suitably-operated cross-head, B, in which my improved punch C is secured.

D is an intermittingly-rotated dial-plate, so having pins E, upon which the cartridge-

shells are adjusted during operation, the arrangement of the mechanism being such that the said pins carrying the shells shall successively stop under the punch while the latter descends.

The punch C consists of a sleeve or socket, F, having anib, G, adapted to enter the pocket of a cartridge-shell. Near its upper end the said sleeve is provided with a vertical slot, H, to receive a pin or screw, I, fixed in a rod or 65 follower, J, sliding vertically in the said sleeve or socket, between the bottom of which and the lower end of said follower a spring or cushion, K, is interposed, as shown in Fig. 3 of the drawings.

The shank L of the rod or follower J is provided with suitable means for attaching it to the cross-head of the machine.

The operation of my invention will be readily understood from the foregoing description and 75 by reference to the drawings hereto annexed. The cartridge-shells are placed upon the pins E of the dial-plate D and the priming in the pockets of the shells. As the machine operates the shells are successively brought un- 80 der the punch, which is forced down by its operating mechanism, thus compressing the primers in the pockets. Owing to the spring or cushion interposed between the rod J and the punch-sleeve, the action upon the priming 85 is not like a sudden blow, but more in the nature of a gradual pressure, by which explosion of the primers and the danger resulting therefrom are avoided.

It will be seen that my improved punch may 90 be applied to machines now in use at a trifling expense.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a machine for setting primers in cartridge-shells, the combination, with the intermittingly-rotating table B, having pins E, of the vertically-reciprocating cross-head B, carrying the punch C, consisting of the rod J, 100 having pin or screw I, the sleeve or socket F, having nib G and vertical slot H, and the spring or cushion K, as herein described, for the purpose set forth.

In testimony that I claim the foregoing as 105 my own I have hereto affixed my signature in presence of two witnesses.

Witnesses: AMOS DICKERMAN. GEORGE F. BURGESS, EDWARD F. MANSFIELD.