

(No Model.)

T. R. MARTIN.
PRIMER FOR CARTRIDGES.

No. 267,552.

Patented Nov. 14, 1882.

Fig. 1.



Fig. 2.



WITNESSES

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THOMAS R. MARTIN, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE
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PRIMER FOR CARTRIDGES.

SPECIFICATION forming part of Letters Patent No. 267,552, dated November 14, 1882.

Application filed March 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS R. MARTIN, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Cartridge Caps or Primers; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in the manufacture of metallic percussion-caps, but more particularly to that class commonly known as "cartridge-primers," the object being to furnish a cap or primer of a uniform thickness throughout, possessing a greater density, and capable of being properly charged with fulminate and foil without being pressed out of shape during the process of manufacture, all as will be hereinafter fully described, and specifically designated in the claims.

In the accompanying drawings, Figure 1 represents an enlarged side view of my improved metallic cap or primer, and Fig. 2 a vertical longitudinal section of the same.

It may be observed that it has heretofore been customary to make percussion-caps or cartridge-primers from soft or annealed metallic sheets or bars; but it has been found in actual use and experiment that it is almost impossible to uniformly anneal the metal throughout the entire sheet or bar, the consequence being that the caps or primers drawn from such metal are defective in many respects—such as one side being weaker or lighter than the other—and the construction generally lacking uniformity, thereby resulting in the loss of a considerable number by the bending or crippling of the weaker portions during the operation of charging the same with the fulminate and foil.

In carrying out my improvements, which obviate the above-mentioned defects, I use sheets of copper rolled slightly hard in place of the soft or annealed metal sheets from which

the caps or primers have heretofore been made, said rolled copper sheets being capable of being brought to a uniform density throughout, and the caps or primers formed from the same, being hard and rigid and of a uniform construction, are not liable to be displaced or bent out of shape during the operation of charging them with the fulminate and foil in the usual manner. The completed article, being much more dense, is capable of properly receiving the blow to discharge the same when in use without lessening its explosive qualities, and the toughness of the metal used in its construction prevents it from flying off in particles when discharged or being pierced by the firing-pin, which latter is a serious objection to those now commonly used.

In the process of forming the cap or primer by my improved method the blanks are made larger and a larger punch is employed, for the reason that the metal used does not draw as much as if the metal were soft or annealed.

The advantages of my invention will be readily seen without a more minute description, inasmuch as it combines in its construction and operation a higher degree of utility, economy, and efficiency than those heretofore employed for the same purpose.

Having thus described my invention, what I claim as new and useful is—

1. As an improved article of manufacture, the herein-described copper cartridge cap or primer, the shell A of which is of a uniform thickness and density throughout, and provided with fulminate, substantially as and for the purpose specified.

2. The herein-described process of manufacturing cartridge caps or primers from enlarged blanks cut from copper sheets rolled slightly hard and without annealing at any stage of the process, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS R. MARTIN.

Witnesses:

E. A. PENDLETON,
E. D. STEELE.