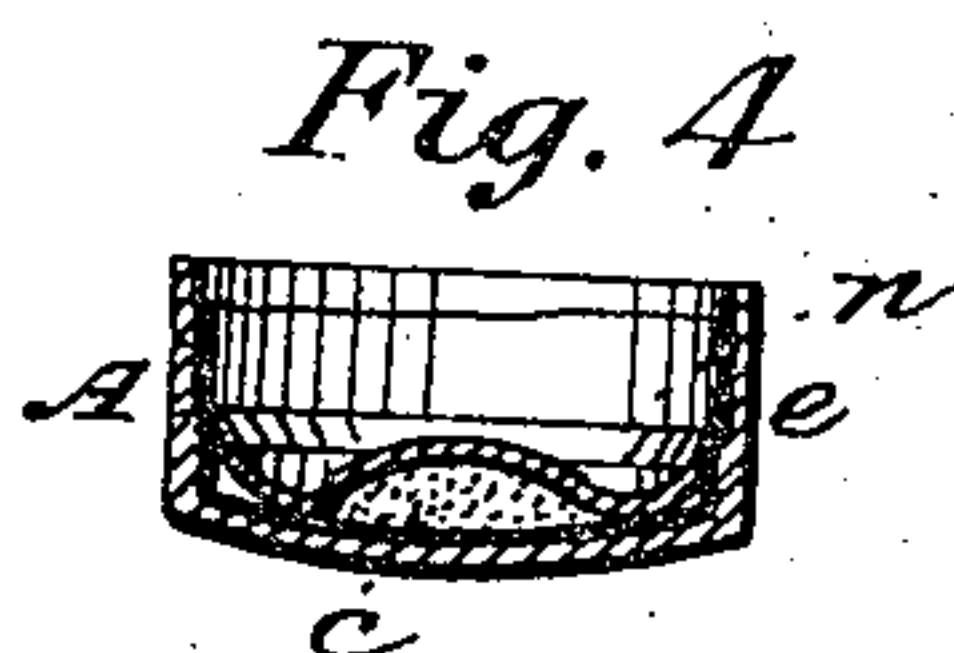
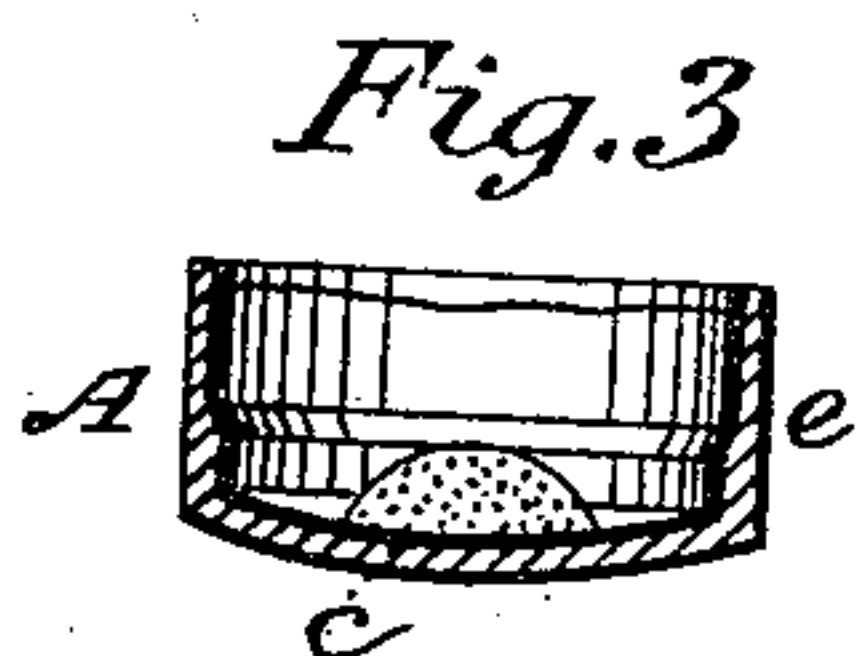
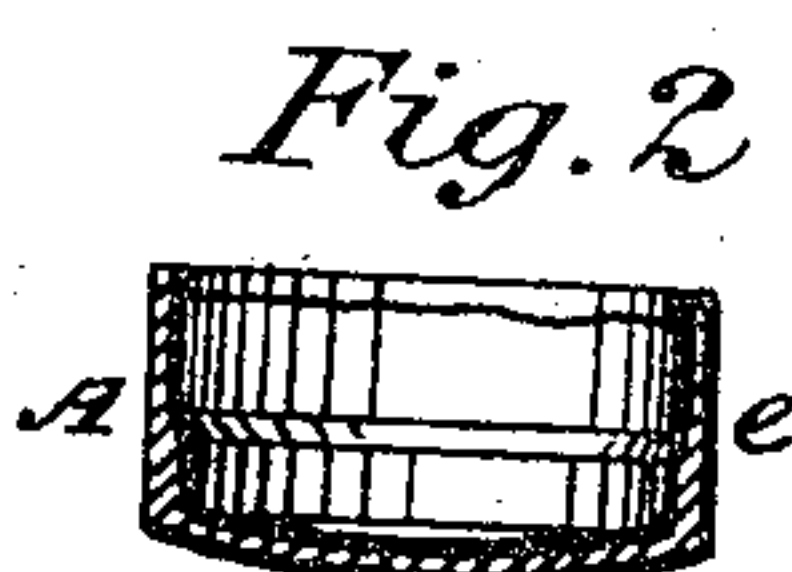
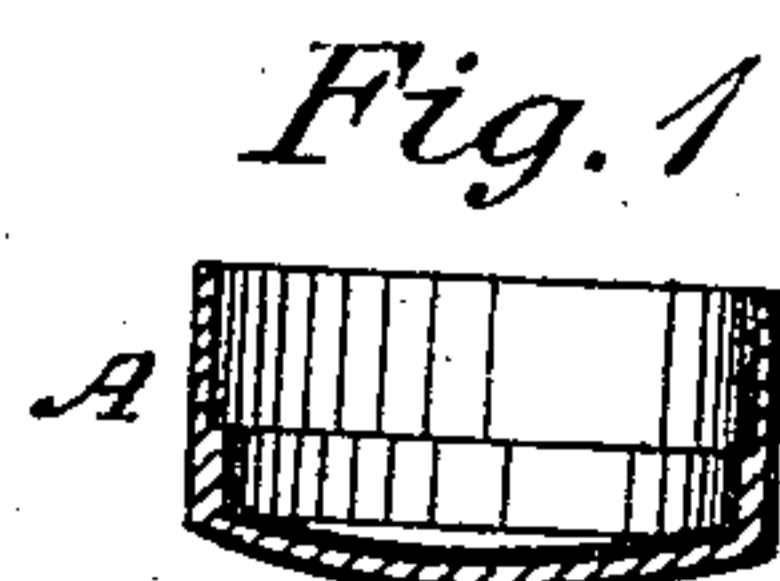


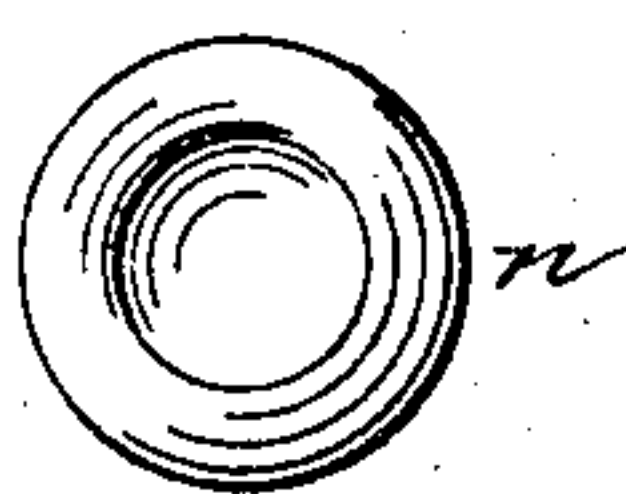
A. C. HOBBS.  
Percussion Cap.

No. 94,743.

Patented Sept. 14, 1869.



*Fig. 5*



Witnesses:  
*L. Hailer*  
*Phil. T. Dodge*

Inventor:  
*A. C. Hobbs.*  
*by Dodge & Mun*  
*his Atty.*

# United States Patent Office.

A. C. HOBBS, OF BRIDGEPORT, CONNECTICUT.

Letters Patent No. 94,743, dated September 14, 1869.

## IMPROVEMENT IN PERCUSSION-CAPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, A. C. HOBBS, of Bridgeport, in the county of Fairfield, and State of Connecticut, have invented certain new and useful Improvements in the Manufacture of Gun-Caps; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

My invention relates to gun-caps; and

It consists in so constructing them that the fulminate, instead of being in contact with the metallic surfaces of the cap or its lining, shall be enclosed between two varnished surfaces, and thus insulated from the metal, as hereinafter more fully explained.

In the drawings—

Figures 1, 2, 3, and 4, are sectional views of a cap in the various stages through which it passes in the process of manufacture.

Figure 5 represents simply a disk, of tinfoil, as cut out for the lining.

In the manufacture of gun-caps, it has hitherto been customary to place in the shell or cap a drop of varnish, then place therein the fulminate, and over that a disk of plain tin-foil. When thus made, the fulminate mixed with the varnish and the mass, thus comes into direct contact with the metal of the cap, and also with the lining, when it was pressed in upon it, and by these means it often happens that the cap is rendered useless.

In constructing my cap, I take the shell A, which may be of any required form and size, as shown in fig. 1, and place therein a drop of varnish, which at once spreads over its interior surface, more or less, and as it dries, forms a coating, e, therein, as shown in fig. 2.

After the varnish has become partially dried, I place the fulminate c in the cap, as represented in fig. 3.

I then cut from a sheet of tin-foil, which has been previously prepared, by coating one surface with varnish, a disk, n, and place it in the cap, with its varnished side next to the fulminate, as represented in fig. 4, and press it down thereon, which completes the operation.

It will thus be seen that the fulminate is enclosed entirely between varnished surfaces, and that it nowhere comes directly into contact with the metal.

Caps thus made are not only water-proof, but they are sure fire, and can be stored and kept for an indefinite length of time, without deterioration, either from the effects of moisture, or from any injurious effects of the metal upon the fulminate, or *vice versa*.

Having thus described my invention,

What I claim, is—

A percussion-cap, for guns, having its fulminate enclosed between varnished surfaces, substantially as described.

A. C. HOBBS.

Witnesses:

ROBT. I. WHITE,  
A. J. HOBBS,