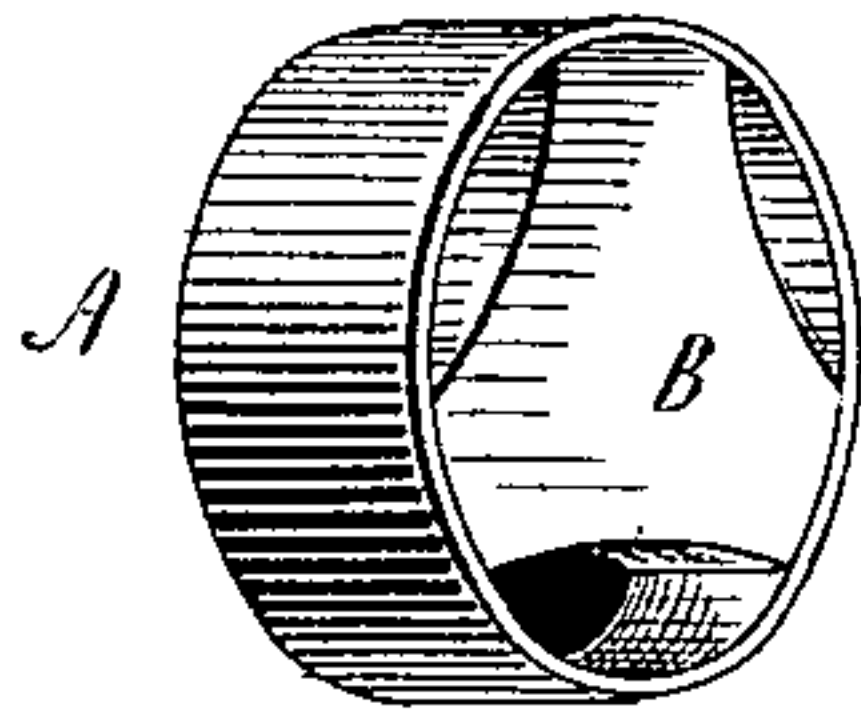


O. F. WINCHESTER.  
Primers for Cartridges.

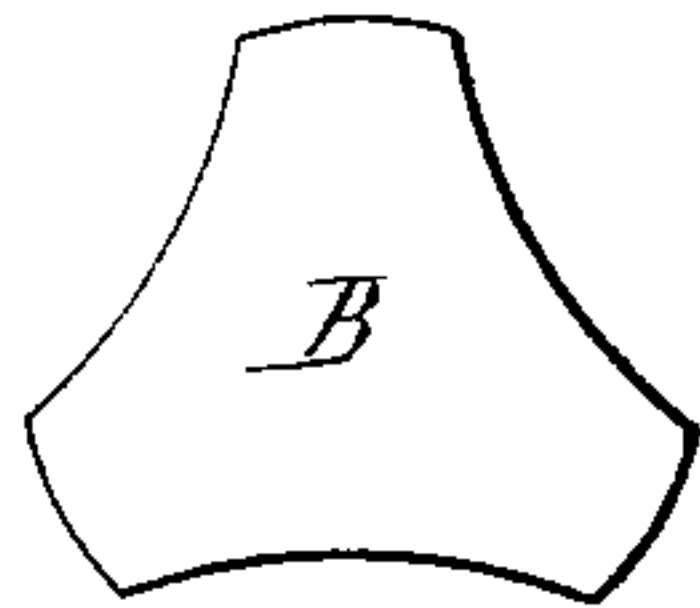
No. 152,936.

Patented July 14, 1874.

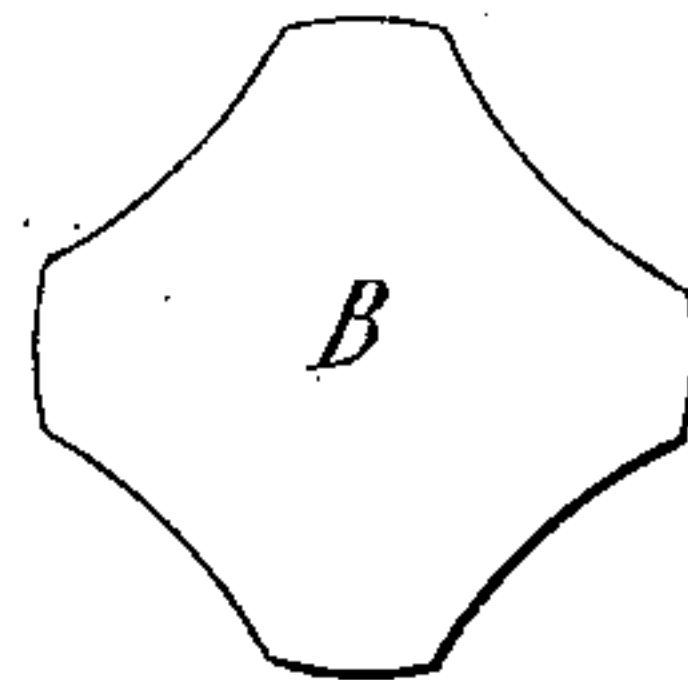
*Fig. 1*



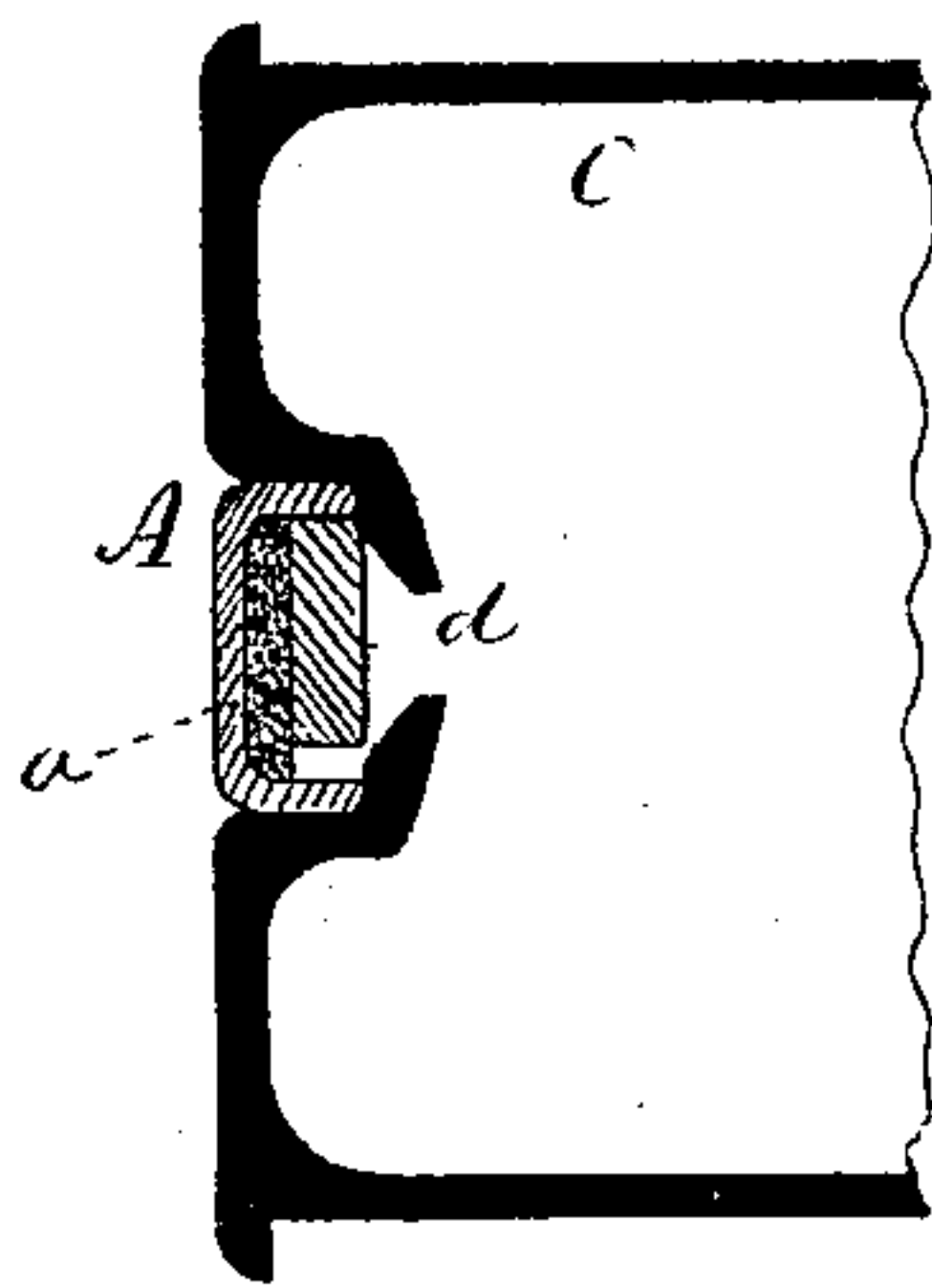
*Fig. 2*



*Fig. 3*



*Fig. 4*



*Witnesses*

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*By Atty*

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# UNITED STATES PATENT OFFICE.

OLIVER F. WINCHESTER, OF NEW HAVEN, CONNECTICUT.

## IMPROVEMENT IN PRIMERS FOR CARTRIDGES.

Specification forming part of Letters Patent No. **152,936**, dated July 14, 1874; application filed November 6, 1873.

*To all whom it may concern:*

Be it known that I, OLIVER F. WINCHESTER, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Primer for Metallic Cartridges; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of the primer; Fig. 2, a diagram of the anvil; Fig. 3, a modification of the same; Fig. 4, a longitudinal central section of the cartridge-shell with the primer attached.

It is customary at the present day to use in breech-loading guns what is termed a firing-pin—the same being a pin inserted loosely in the breech, with its point arranged to hit the primer or cap when struck by the hammer, and thus explode the primer. It has been found necessary, by experience, to have this firing-pin play loosely in its seat in the breech, so that it may not stick fast, either by becoming fouled or rusty, or by the accumulation of dirt; and when thus loosely arranged there is more or less lateral play to the point of the pin, and hence it is not always certain to strike the primer exactly at the center; and as primers are usually made with their anvil composed of a thin piece of metal set on end in the primer or cap, it will at once be seen

that if the pin does not strike at the center, the cap or primer is not sure to be exploded. To remedy this difficulty, and provide a primer that can be successfully used, even with a very loose firing-pin, is the object of my invention; and to do this, I construct it as follows:

The cap A may be made of any desired size, like an ordinary gun-cap, though preferably of greater diameter and of less depth, it being provided with fulminate in the ordinary way. I then provide an anvil, B, which consists of a flat piece of metal punched out, of such a size that if it were left in the form of a disk it would just fit in the cap A. But in forming this anvil I cut out of its edge three or four semicircular pieces, leaving it in the forms represented in Fig. 2 or Fig. 3.

By this plan of constructing and inserting the anvil B I am enabled to make a primer that answers every purpose required, and which entirely obviates the difficulty resulting from the use of a loose firing-pin.

Having thus described my invention, what I claim is—

A primer for external application to central-fire cartridges, consisting of a cap, A, and a flat-disk anvil having a solid or unbroken body, with notches in its periphery for the passage of the flame, substantially as shown and described.

OLIVER F. WINCHESTER.

Witnesses:

J. H. SHUMWAY,  
A. J. TIBBITS.