W. I. MACOMBER.

ARTILLERY PERCUSSION PRIMER CLOSING DISK.

APPLICATION FILED SEPT. 30, 1915.

1,163,937. Patented Dec. 14, 1915.

FIG. 1.

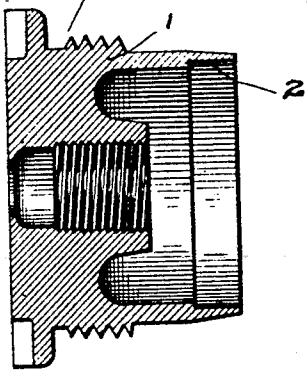


FIG. 2.

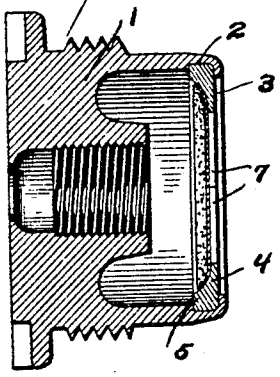
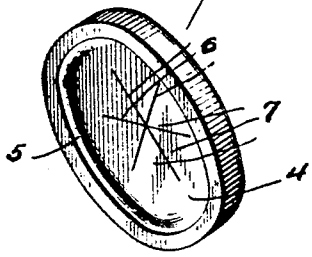


FIG. 3.



Witnesses

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ARTILLERY PERCUSSION-PRIMER-CLOSING DISK.

1,163,937. Specification of Letters Patent. Patented Dec. 14, 1915.

Application filed September 30, 1915. Serial No. 53,395.

To all whom it may concern:

Be it known that I, WILLIAM I. MACOMBER, a citizen of the United States, and a resident of Providence, in the county of Providence and State of Rhode Island, have invented new and useful Improvements in Artillery Percussion-Primer-Closing Disks, of which the following is a specification.

My invention relates to closing disks for percussion primers of fixed artillery ammunition.

The object of my invention is to produce a percussion primer closing disk for artillery ammunition formed of pressed metal.

A further object of my invention is to produce a closing cap which will be of sufficient rigidity to insure complete ignition of the booster charge and yet retain sufficient elasticity to prevent the breaking off of the several segments or parts of segments, a condition which is apt to cause the bursting of a rifle barrel, and a still further object of my invention is to produce a more simple, cheap and efficient primer closing disk than has heretofore been attained.

To these ends, my invention includes the structure, formation and arrangement of component parts to be hereinafter described and more particularly pointed out in the claim.

In the accompanying drawings, in which like reference characters indicate similar parts, Figure 1 is a longitudinal sectional view of a conventional form of an artillery percussion primer; Fig. 2 is a similar view thereof showing my closing disk in position in the percussion primer, and Fig. 3 is a perspective view of my closing disk removed.

Referring to said drawings, 1 indicates a percussion primer of conventional form having a closing-disk recess 2 therein into which the closing disk 3 of my invention is adapted to be inserted and secured.

My closing disk, as shown, comprises a circular disk 4 having an annular flange 5 surrounding its edge. As further shown, the disk or body portion 4 is provided with a plurality of radial slits 6 extending from its center to points near the inner edge of the flange 5, thus dividing its face into a plurality of triangular sectors 7 which converge at the center of the disk.

My closing disk is preferably formed of an integral sheet of metal. In its making, the plate is first cupped, then folded and formed to produce the circular flanged structure. Thereafter, it is slit, and then is sized for use.

It will be apparent that the stamping and drawing method of manufacture described is highly economical as to the labor and material employed and may be operated at great speed of production. Furthermore, this structure, it will be appreciated, will facilitate the transmission of the flame from the exploding element to the charge within the case, and without the danger of breaking off the segments or parts thereof.

Having thus described my invention, what I claim as new and desire to be secured by Letters Patent, is—

An ammunition percussion primer closing disk, with radial slits comprising a dished plate made from sheet metal and having an annular flange formed by drawing, folding slitting and stamping.

WILLIAM I. MACOMBER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."