J. T. PARKER.

PROJECTILE FOR ORDNANCE.

APPLICATION FILED DEC. 9, 1914.

1,149,679. Patented Aug. 10, 1915.

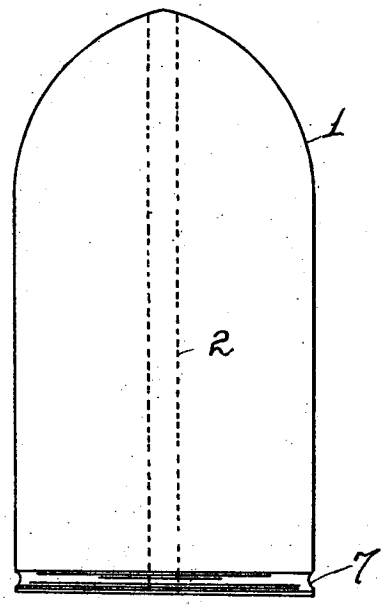


Fig 1

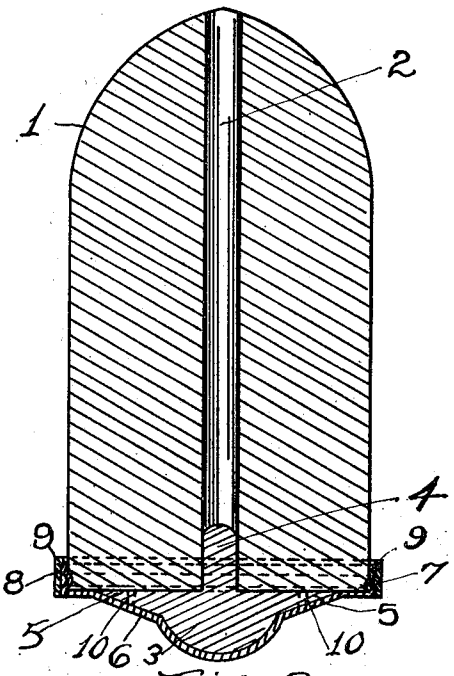


Fig 2

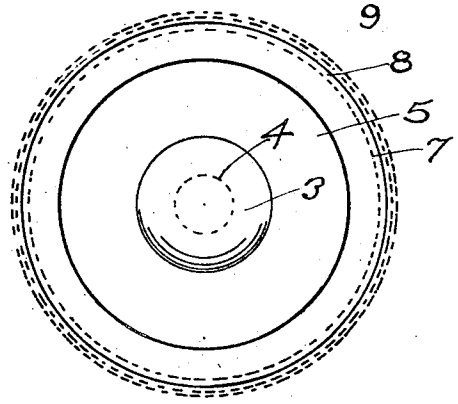


Fig 3

Witnesses
J. T. Phelps
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UNITED STATES PATENT OFFICE.

JOSEPH THOMPSON PARKER, OF WASHINGTON, DISTRICT OF COLUMBIA.

PROJECTILE FOR ORDNANCE.

1,149,679. Specification of Letters Patent. Patented Aug. 10, 1915.

Application filed December 9, 1914. Serial No. 876,236.

To all whom it may concern:

Be it known that I, JOSEPH THOMPSON PARKER, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Projectiles for Ordnance, of which the following is a specification.

The object of this invention is to so construct the projectile that with a given weight of metal and a given charge, it can be fired to a greater distance, may be fired more accurately and will have a greater penetrating power, the latter being due to its having less atmospheric resistance in its flight through the air, as more fully hereinafter set forth.

In the drawings annexed, Figure 1 is a side elevation of a projectile as it appears in flight; Fig. 2 a sectional elevation of a projectile as it appears before firing; and Fig. 3 a plan view of the plug detached.

The projectile body 1 is of the usual shape except that it is provided with a hole or passage 2, circular in cross-section and extending centrally from the point of the projectile to the base thereof. Affixed to the base is a circular metal plug 3 having a tapered portion 5 which lies against the base of the projectile around the passage 2, the edge of this tapered portion terminating short of the edge of the projectile. The plug is provided with a central lug 4 which fits in the passage 2, and the body of the plug is thickened centrally. The plug is held in place against the base of the projectile by a thin metal cap 6 which is shaped to fit the face of the plug and has its outer edge bent to form an annular flange 8 which hugs the base-end of the projectile, this flange being beaded to fit into a groove 7 formed around the projectile near its base. Around the flange 8 is fitted a metal band 9.

When the projectile is fired, the pressure of air through the passage against the plug and against the band 9 will be sufficient to throw off the plug, the cap and the band, and thus leave the projectile free from these devices during its flight. It will be understood that the parts 8 and 9 will clamp the plug to the projectile with sufficient firmness to permit the projectile to be handled and transported without dislodging the parts, but not with sufficient firmness to prevent the air pressure caused by the travel of the projectile from throwing these parts off the projectile as soon as the projectile issues from the bore of the gun. The parts 8 and 9 will perform the additional function of a packing for the shell, and the purpose in centrally thickening the plug is to enable it to withstand the pressure of explosion at the point where the greatest strain will come, namely, coincident with the bore 2. The lug 4 assists in holding the plug in position during handling and transportation of the device and also tends to strengthen the plug centrally thereof. By employing a thin metal cap to fasten the plug in position and having the outer edge of this cap hug the base end of the projectile, it will be seen that it will be a simple matter to obtain the desired degree of clamping action upon the projectile. In some cases the annulus 9 may be dispensed with entirely, as is obvious. It will be seen that in the after flight of the projectile, it will have less air resistance than a solid projectile, whereby distance, aim and penetrating power will be increased. If desired, the cap and plug may be further secured to the projectile by means of screws 10 or other fastening means.

I claim—

1. A projectile having a central channel extending through it, a plug applied to its rear end and provided with a projection entering said channel, the plug being thickened centrally, a cap embracing and inclosing the rear face of the plug and having its annular edge embracing the rear end of the projectile and interlocked therewith, and an annular band fitting over the said embracing edge of the cap.

2. A projectile provided with a longitudinal central channel and an external annular groove near its rear end, a plug fitted against the rear end of the projectile, a cap inclosing the plug and the rear end of the projectile, the cap being provided with an annular bead fitting in the aforesaid groove, and an annular band fitted around the beaded edge of the cap.

3. A projectile provided with a central longitudinal passage through it and also with an external annular groove near its base end, a plug covering the rear end of

said passage, and a thin metal cap covering and embracing the plug and having its outer edge flanged, this flange embracing the base end of the projectile and bent so as to enter and interlock with the aforesaid annular groove in the projectile.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses.

JOSEPH THOMPSON PARKER.

Witnesses:
WALTER B. BURROW,
J. L. JEFFRIES, Jr.