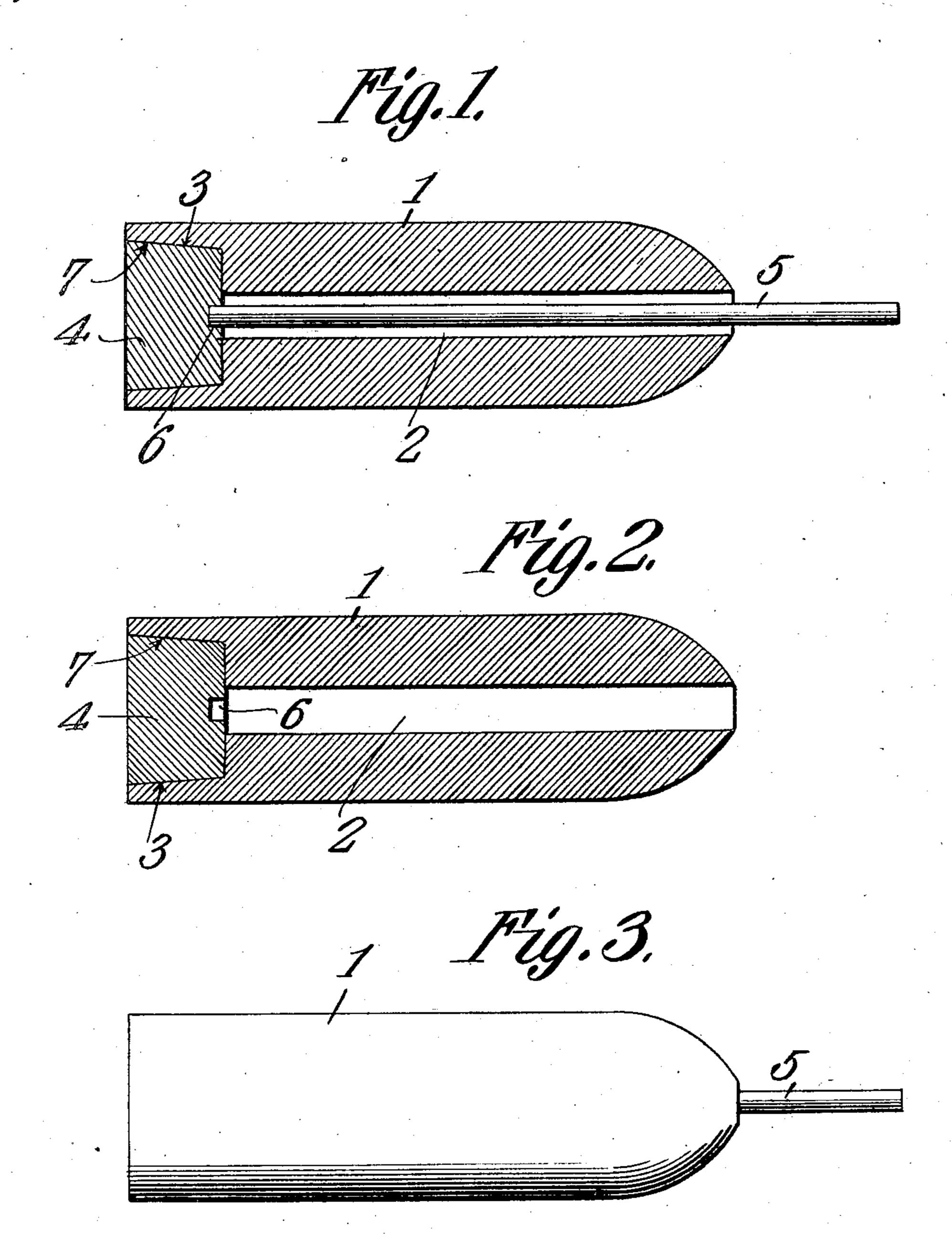
F. E. CLOTZ. PROJECTILE.

APPLICATION FILED MAR. 10, 1908.

906.771.

Patented Dec. 15, 1908



Frank E. Clotz.

334 Ales Elitorneys

Witnesses Collection Carly

UNITED STATES PATENT OFFICE.

FRANK E. CLOTZ, OF MENOMINEE, MICHIGAN.

PROJECTILE.

No. 906,771.

Specification of Letters Patent.

Patented Dec. 15, 1908.

Application filed March 10, 1908. Serial No. 420,239.

To all whom it may concern:

Be it known that I, Frank E. Clotz, a citizen of the United States, residing at Menominee, in the county of Menominee and 5 State of Michigan, have invented a new and useful Projectile, of which the following is a specification.

This invention relates to projectiles for firearms and cannons, and has for its object to provide a projectile or bullet by means of which after it is discharged it will travel with less resistance, greater speed and a longer distance.

The invention has for its object to provide a projectile or bullet of this description, as hereinafter set forth and claimed.

In carrying out the invention, the projectile is formed with an axial or longitudinal passage from end to end of the same, and with a plug or pin at the rear end of the projectile which closes said passage.

In the accompanying drawings:—Figure 1 represents in longitudinal section a projectile constructed in accordance with this invention. Fig. 2 is a similar view with the retaining pin removed. Fig. 3 is a side view of a projectile with the retaining pin projecting from the forward end thereof.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

1 indicates a projectile provided with an axial or longitudinal passage 2. At the rear end of the projectile is formed a recess or socket 3, opening into the passage 2, for the reception of a plug 4, which sets into said recess 3, with an approximately loose fit. When the projectile has left the gun, the air rushing through the passage 2 drives the plug 4 out of the recess 3 and leaves the longitudinal passage through the projectile 1 open for the passage of air. In order to retain the plug 4 in place during the loading of the gun,

a pin a is provided, one end of which seats into a socket or hollow 6 in the front face of 45 the plug 4. After the projectile is placed against the powder, or in position for firing, the pin 5 is withdrawn. In order that the plug 4 may readily be pushed or blown out of the recess 3, it is preferably formed with 50 tapering sides 7. By means of this construction of the projectile the air passing through the passage way 2 will lessen the resistance to the projectile or bullet and will cause it to move faster and in a direct line, 55

· What is claimed is:—

1. A projectile having a longitudinal concentric passage of uniform bore throughout, and being provided at its rear end with an annular recess having a conical side wall, the 60 rear end of said recess being of greater area than the forward end thereof, and a conical plug adapted to fit in the said recess, and having its forward side bearing against the bottom of the recess, and its rear side flush 65 with the rear end of the projectile.

2. A projectile having a longitudinal concentric passage, of uniform bore throughout, and being provided in its rear end with an annular recess, having a conical side wall, the 70 rear end of the recess having greater area than the forward end thereof, a plug fitting snugly within the recess and having its forward side bearing against the bottom thereof, and its rear side occupying the same plane 75 as that occupied by the rear end of the projectile, said plug having in its forward side a centrally located socket which is in alinement with the longitudinal axis of the passage.

In testimony that I claim the foregoing as 80 my own, I have hereto affixed my signature in the presence of two witnesses.

FRANK E. CLOTZ.

Witnesses.
W A PEN GIT

W. A. PEN GILLY, ORIDIA TROSDAHL.