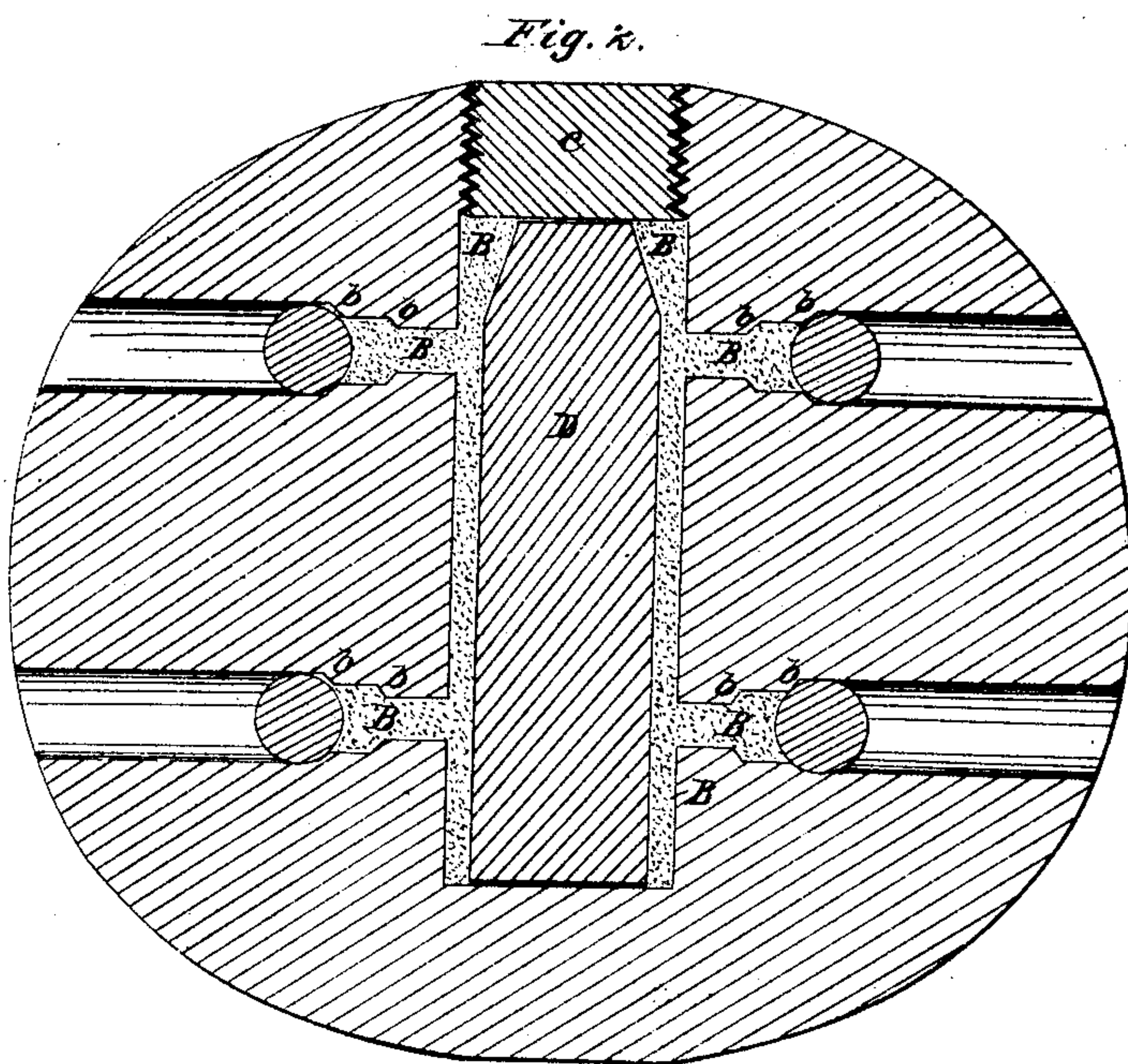
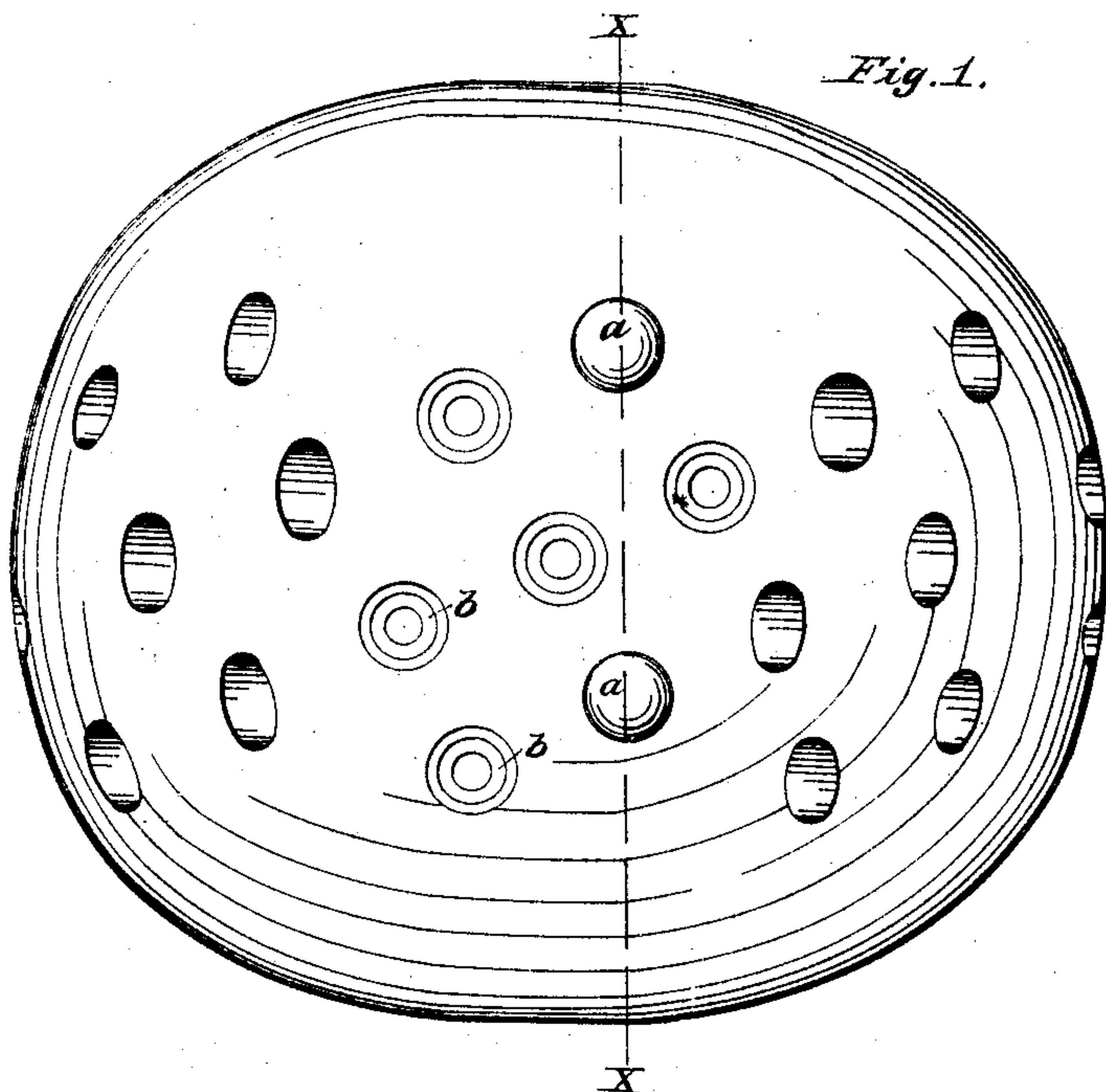


G. C. JONES.
SHELL FOR ORDNANCE.

No. 34,302.

Patented Feb. 4, 1862.



Inventor:
George C. Jones

UNITED STATES PATENT OFFICE.

GEORGE C. JONES, OF ALNA, MAINE.

IMPROVEMENT IN SHELLS FOR ORDNANCE.

Specification forming part of Letters Patent No. 34,302, dated February 4, 1862.

To all whom it may concern:

Be it known that I, GEORGE C. JONES, of Alna, in the county of Lincoln, in the State of Maine, have invented a new and useful Projectile, which I call a "Combined Shot and Shell;" and I do hereby declare that the following is a description of the construction and operation of the same in terms which I now think sufficiently full, clear, and exact, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view; Fig. 2, a vertical section through the line X X of Fig. 1, and Fig. 3 a representation of the loading-instrument.

The nature of my invention consists, first, in flattening the projectile on two opposite sides, or at its poles, and in perforating its surface at its equatorial line, and in parallel lines on each side thereof for a limited distance with bores reaching to a chamber whose sides are concentric with the axis; and, second, in providing the projectile with an enlarged chamber or cavity, and using in connection therewith, when desirable, a removable plug or cylinder of wood or other material.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The projectile is cast in such a manner as to assume the form that would be given to a globe of plastic materials revolving rapidly on its axis—that is, it is more or less flattened at its poles, so that supposing the projectile to rest, as represented in Fig. 1 of the drawings, on one of its flattened sides, all its vertical planes will be ellipses, while all its horizontal planes will be circles. It is also cast with an enlarged chamber or cavity whose vertical confines are concentric with the supposed axis, and which terminates within an inch (more or less) of the lower pole or surface, its top pole or surface consisting of a screw-plug, C. This projectile, furthermore, has drilled into it all over its equatorial belt, but not on its flattened or elliptical sides, any number of bores, which bores connect with the enlarged chamber or cavity and are horizontal or perpendicular to the axis.

In charging my projectile a cylinder, of wood or other material, D, is inserted into the enlarged chamber or cavity, so as to leave an annular space between it and the walls of the enlarged chamber or cavity. The

bullets or balls are then inserted into the bores and driven down upon their shoulders *b* with the instrument, Fig. 3. The powder is next poured into the annular space around the plug or block D, from whence it finds its way into the bores behind the bullets, when the screw-plug C is inserted, and the projectile is ready for use as a shot. In such use the projectile is inserted into the bore of the gun with its axis coincident with the axis of the gun, and the bores drilled or cast in the equatorial belt perpendicular to both axes, so that in the discharge from the gun the gases act against one of the solid flattened surfaces of the projectile, and not against a surface perforated all over with holes, in which latter case, in the event of a premature explosion of the charge in the projectile, the bullets flying rearward would be likely to prove almost as fatal to friend as foe. As to the flattened sides of my projectile, the object of this feature is to give to the missile a tendency to fall upon one of such sides when it comes to a state of rest, in order that the bullets in the projectile may be dispersed horizontally.

If it be desirable to use my projectile as a shell, I then remove the block or plug D and fill its chamber or cavity with powder, which, when the fuse ignites it, will burst the projectile and throw its fragments and the bullets in all directions.

If deemed necessary, several balls may occupy each bore of the projectile, and inflammable materials may be introduced between the balls, or in front of the same, for the purpose of setting fire.

Having thus described my invention and the manner in which it is to be used, what I claim therein as new, and desire to secure by Letters Patent of the United States, is—

1. A projectile flattened on opposite sides or at its poles when its equatorial belt or larger diameter only is perforated with holes or bores perpendicular to the axis of the projectile for the reception of bullets, substantially in the manner and for the purpose described.

2. The removable plug or block D, by means of which, in combination with the enlarged chamber or cavity, I am enabled to use my projectile either as a shot or a shell, substantially as set forth.

Witnesses: GEORGE C. JONES.

E. EVANS, Jr.,

A. C. TONNER,