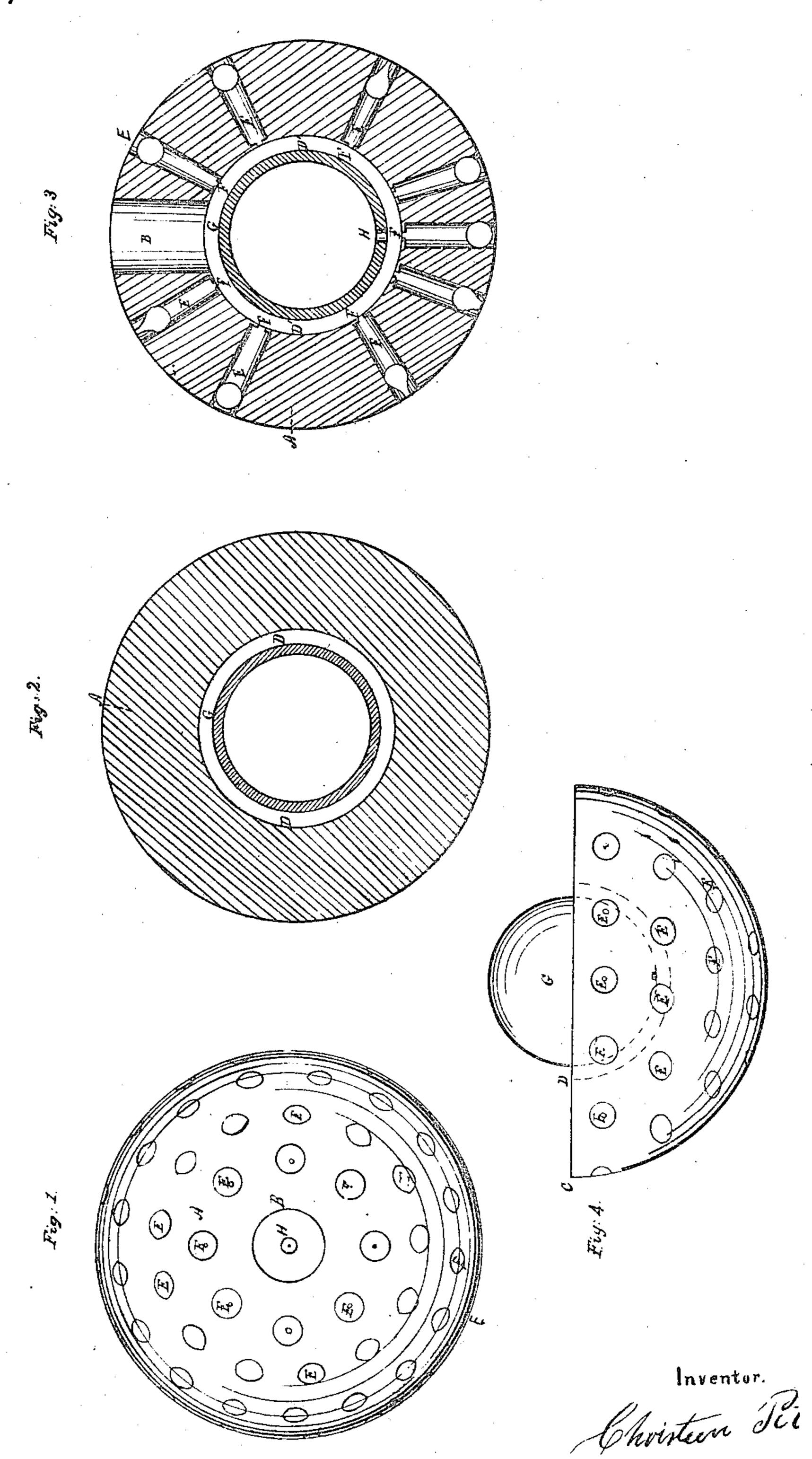
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Mitnesses. J. Braineret a. Butalellen

United States Patent Office.

CHRISTIAN PETERS, OF WADSWORTH, OHIO.

IMPROVEMENT IN SHELLS FOR ORDNANCE

Specification forming part of Letters Patent No. 34,979, dated April 15, 1862.

To all whom it may concern:

Be it known that I, Christian Peters, of Wadsworth, in the county of Medina and State of Ohio, have invented new and useful Improvements in Ordnance Projectiles; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a full view of the projectile. Figs. 2 and 3 are cross-sections, and Fig. 4 is

a hemispherical view.

Like letters refer to like parts.

The nature of my invention relates to the construction of a projectile charged with powder and leaden bullets, which are discharged from radial bores from all parts of the surface at the same instant from an interior fuse, and instantly thereafter exploding the projectile itself, from another reservoir of powder, which is ignited simultaneously with the discharge of the balls from the radial bores, which structure is rendered more dense, as a whole, than the ordinary bomb-shell, and can therefore be projected to a greater distance and prove doubly destructive—first, from the bullets with which it is charged, and, second, by the bursting of the shell itself.

The projectile is made of cast-iron in the form of a sphere, A, Fig. 1, with a fuse-hole, B, of about one inch in diameter for an eightinch shell. The interior of the shell is cast hollow, the core of sand being supported through the fuse-hole B. The thickness of the metal from C to D, Fig. 4, is equal to about one-half the diameter of the cavity D' D' of the projectile, Fig. 2. Radial holes E are now bored from the surface till they nearly penetrate the cavity D' D', as in Fig. 3, a small fuse-hole only, as seen at F, Fig. 3, penetrating this interior cavity. These radial holes E for a shell of eight inches in diameter should be sufficiently large to carry a half-ounce ball. The bores E are all charged with powder and

ball, as seen in section, Fig. 3. An indiarubber hollow ball, G, having a fuse-hole, H, is compressed and passed through the fusehole B into the interior cavity of the projectile, as seen in the figures. The fuse-hole H being visible through the fuse-hole B, as seen in Fig. 1, (the hollow ball G having expanded to its natural position, as seen in Fig. 4,) is now filled with powder and a half-second or quarter-second fuse inserted in the fuse-hole H. The india-rubber ball, as charged, is now rolled around so that its fuse at H shall be opposite the fuse-hole B, as seen in Fig. 3. The space D' D' between the inner surface of the cavity and the outer surface of the india-rubber ball is now also charged with powder. The fuse-hole B is now furnished with a fuse marked off in seconds of time, and the projectile is ready for use. If the projectile requires ten seconds for flight, the fuse is drawn out and cut off at that figure. Upon being discharged from the gun, this fuse is set on fire, and at the termination of its ten seconds' flight the powder exterior to the india-rubber ball G is thereby ignited, and every bullet is instantaneously discharged from the several bores E, which discharge also fires the fuse H, and the whole shell is instantaneously exploded, breaking into numerous fragments by means of being previously weakened by the bores E. The fuse can be gaged to any desired distance, the same as other explosive projectiles.

What I claim as my improvement, and desire to secure by Letters Patent, is—

The herein-described construction of ordnance projectiles, the same being charged with leaden bullets, as specified, and provided with an interior magazine of powder, by which the projectile itself is instantly exploded after the discharge of the bullets, as herein set forth.

CHRISTIAN PETERS.

Witnesses:

J. BRAINERD,

A. McClelland.