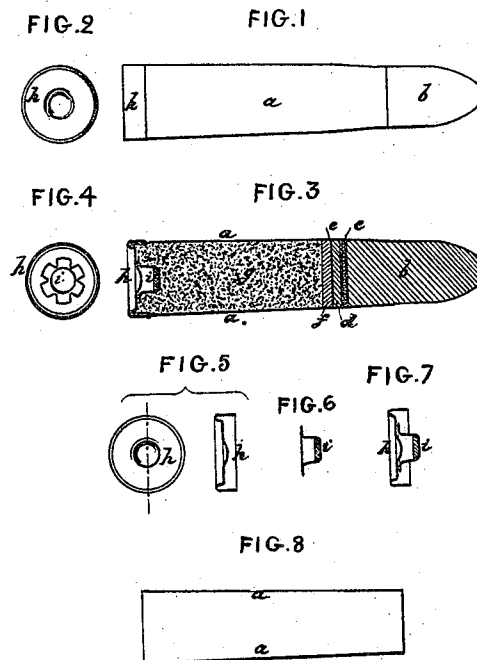


L. T. De FROIDEVILLE.
CARTRIDGE.

No. 172,714.

Patented Jan. 25, 1876.



Witnesses:

Ben M. Hoyle

Emile Dahan

Inventor:

L. T. De Froideville

UNITED STATES PATENT OFFICE.

LOUIS T. DE FROIDEVILLE, OF PARIS, FRANCE.

IMPROVEMENT IN CARTRIDGES.

Specification forming part of Letters Patent No. **172,714**, dated January 25, 1876; application filed August 4, 1875.

To all whom it may concern:

Be it known that I, LOUIS T. DE FROIDEVILLE, of Paris, France, have invented a new and Improved Cartridge; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a side elevation; Fig. 2, an end view; Fig. 3, a longitudinal section. Figs. 4, 5, 6, and 7 are different views of the cap; and Fig. 8 is the cylindrical cartridge-case, of tin-foil.

My invention relates to a novel construction of cartridge; and it consists in interposing between the powder and the bullet a layer of grease to keep out dampness, to operate as a gas-check, and lubricate the gun; and then, to prevent the grease from permeating the powder-grains, I place between the grease and the powder two wads, with a metallic plate placed between them to prevent the absorption and penetration of the grease through the wads, as hereinafter more fully described.

In the drawing, *a a* represent the cylindrical cartridge-case, which is made of pure unalloyed tin, in the shape of very thin leaves, known as tin-foil. The object of this form of case is to secure a metallic cartridge-case, which, while it effectually keeps out moisture,

does not leave a shell in the gun, the tin-foil being volatilized and carried out with the discharged load.

In this case *a* I first insert the bullet *b*, and then place thereupon a layer of grease, *c*, to exclude dampness and lubricate the bullet in its passage out. Said layer of grease, being pushed out with the load, also operates as a gas-check to the burning powder in the rear, thereby increasing the trajectory impulse given to the bullet. I then place upon the grease the wad *d*, and, to prevent the grease absorbed by the wad from permeating the powder, I place upon the first wad, *d*, a metallic plate, *e*, and then cover the same with a second wad, *f*. I then pour in and ram the powder *g*, and afterward affix the cap *i* to the end piece *h*, and attach both to the cylindrical tin-foil cartridge-case, as shown in Fig. 3.

Having thus described my invention, what I claim as new is—

The metallic plate *e*, contained between wads *d f*, combined with the layer of grease *c*, and separating the same from the powder, substantially as and for the purpose described.

LOUIS THUILLARD DE FROIDEVILLE.

Witnesses:

ROBT. M. HUPER,
EMILE DUHAN.