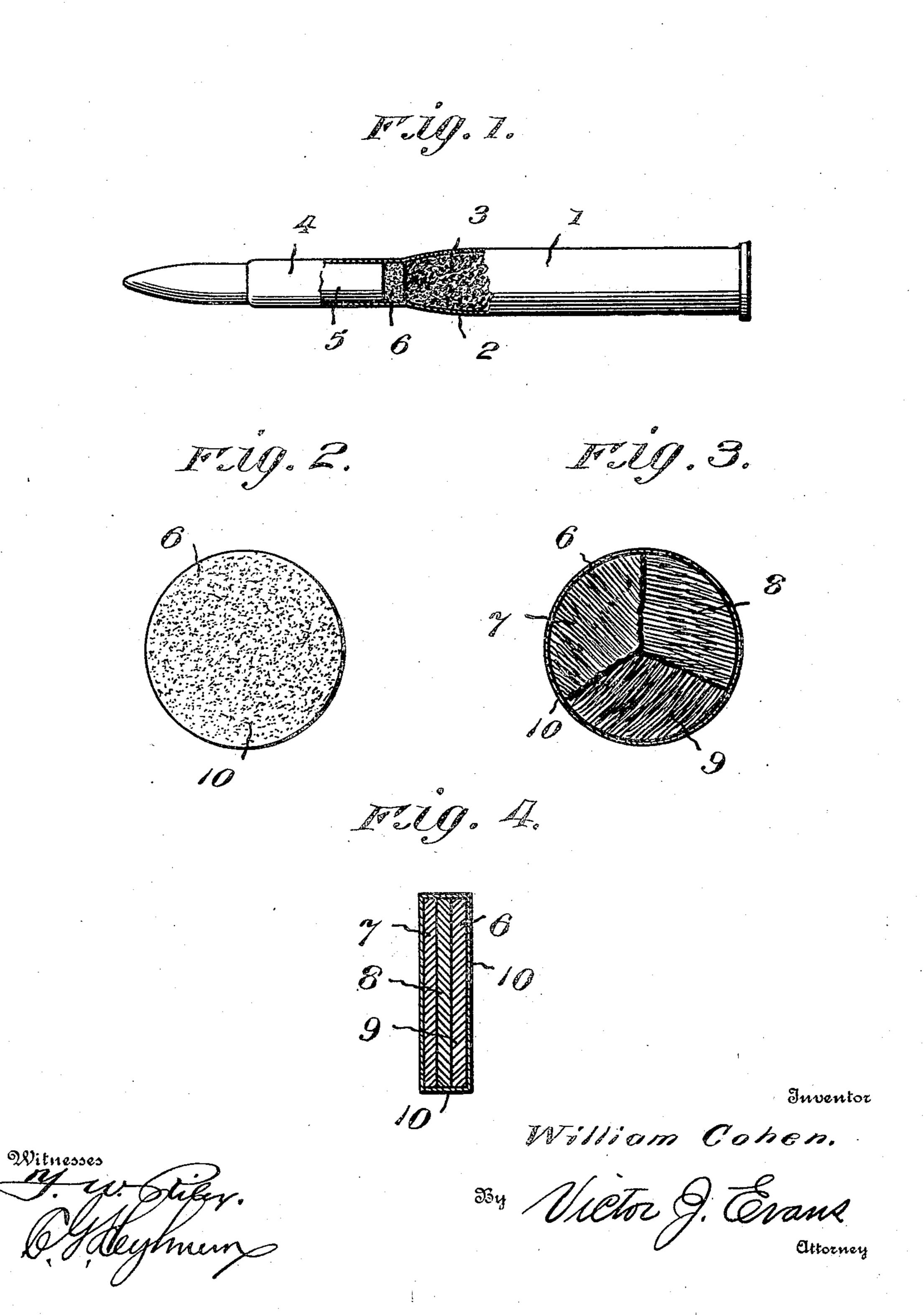
W. COHEN.

CARTRIDGE.

APPLICATION FILED NOV. 21, 1903.



## WILLIAM COHEN, OF NEW YORK, N. Y.

## CARTRIDGE.

No. 796,897.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, William Cohen, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Cartridges, of which the

following is a specification.

This invention relates to cartridges; and the object in view is to provide novel and efficient means whereby a cartridge is adapted when exploded in a firearm to clean and lubricate the barrel through which the bullet or projectile passes. The cleaning and lubricating device is of such a nature that it may be applied to and used in connection with any form of cartridge, and it may also be used in an ordinary muzzle-loading firearm by being inserted between the powder and bullet, shot, or other projectile.

With the above general object in view the invention consists in the novel construction, combination, and arrangement hereinafter fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a sectional elevation of a cartridge, showing the improvement applied thereto. Fig. 2 is a plan view of the cleaning and lubricatthe same, showing the laminated construction thereof. Fig. 4 is a diametrical section through the same.

Like reference-numerals designate corre-

sponding parts in all the figures.

Referring to the drawings, 1 designates a cartridge-shell of any ordinary construction comprising the chamber 2 for the explosive compound 3 and the bullet or projectile receiving portion 4, in which is received a portion of the bullet 5.

In carrying out the present invention a wad 6 is interposed between the charge of powder or other explosive material and the bullet or projectile, as clearly shown in Fig. 1. This wad is of laminated construction or, in other words, is composed of several layers or thicknesses 7, 8, and 9 of wood. The layers may be of any desired thickness, and they are so arranged relatively to each other that the grain of each layer crosses obliquely the grain of the other two layers, as shown in Fig. 3. This forms a strong and unbreakable wad which will withstand the effects of the explosion, the said layers being glued, cemented, or otherwise firmly united in close contact with each other.

The laminated wooden wad made in the manner set forth is coated throughout its entire exterior surface with plumbago, preferably powdered very fine, the plumbago coating being indicated at 10. When the cartridge is fired, the laminated wooden wad is forced lengthwise of the barrel, cutting its way through any material adhering to the inside of the barrel and distributing over the entire inner surface of the barrel a fine layer or coating of plumbago, which serves to lubricate and polish the inside of the barrel. This does away with the necessity of using a ramrod and the usual device for scouring and cleaning out the inside of a barrel, the wad carried by each cartridge being more than enough to compensate for the deposit left in the barrel by the explosion of such cartridge.

Under the arrangement described and by reason of the fact that the grains of the several thicknesses all run in different directions a cross-cut edge of the wad is exposed throughout the entire periphery of the laminated wad. This enables the outer edge of the wad to more effectively take up and hold the coating of finely-powdered plumbago and also to more efficiently distribute said coating wad. Fig. 3 is a sectional plan view of | ing within and apply the same effectively to

the inner surface of the barrel.

Having thus described the invention, what

I claim as new is—

The combination with a cartridge, of a cleaning and lubricating device interposed between the explosive charge and the projectile, said device consisting exclusively of a plurality of layers or thicknesses of wood having their faces placed firmly against and cemented to each other and so related that the grain of each layer runs at an angle to the grain of the other layers, the periphery of the device having a raw cross-cut edge, and a coating of finely-powdered plumbago positively applied as a layer to the front and rear faces of the device and to the periphery, the cross - cut peripheral edge causing the plumbago layer to adhere firmly thereto throughout the thickness thereof.

In testimony whereof I affix my signature

in presence of two witnesses.

WILLIAM COHEN.

Witnesses:

Louis H. Johnson, ALBERT SCHENDEL.