

(No Model.)

W. T. CHAMBERLAIN.  
CARTRIDGE.

No. 249,301.

Patented Nov. 8, 1881.

Fig. 1.



Fig. 2.

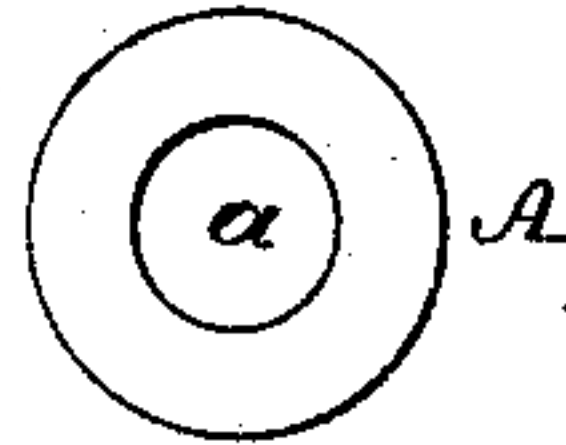


Fig. 3.

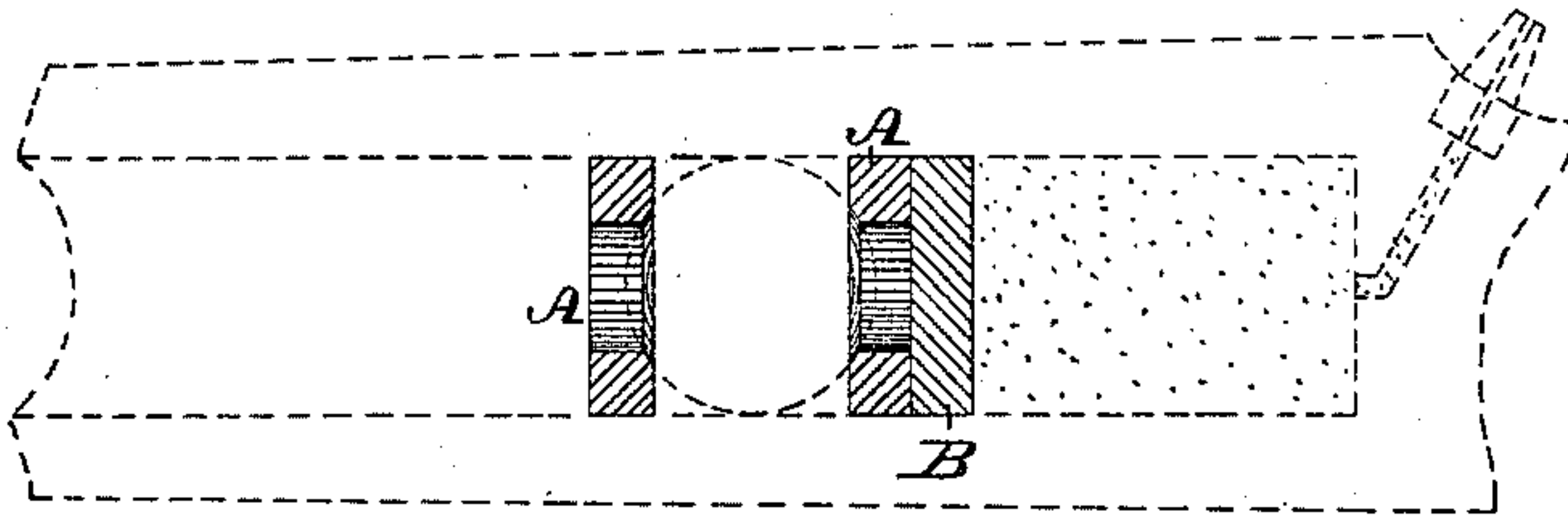


Fig. 4.

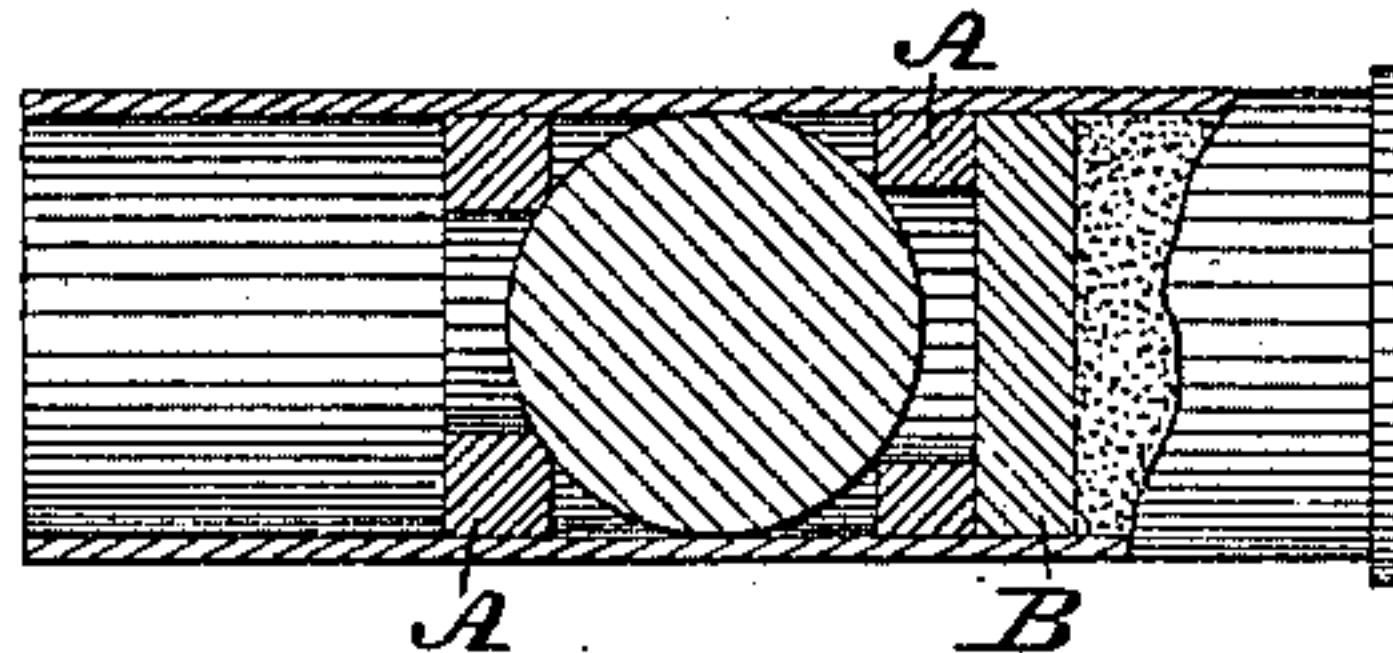
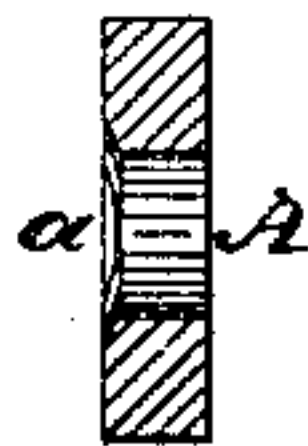


Fig. 5.



Witnesses:

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# UNITED STATES PATENT OFFICE.

WILLIAM T. CHAMBERLAIN, OF NORWICH, CONNECTICUT.

## CARTRIDGE.

SPECIFICATION forming part of Letters Patent No. 249,301, dated November 8, 1881.

Application filed February 18, 1881 (No model.)

*To all whom it may concern :*

Be it known that I, WILLIAM T. CHAMBERLAIN, a citizen of the United States, residing at Norwich, in the county of New London, State of Connecticut, have invented a new and useful Improvement in Wads, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of a wad embodying my invention. Fig. 2 is a face view thereof. Fig. 3 is a longitudinal section illustrating the wad in position in a barrel. Fig. 4 is a longitudinal section of the wads in position in a cartridge. Fig. 5 is a sectional view of one of the wads.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a wad of the form of an annulus, the opening of which is cylindrical, so that the wall of either end thereof coincides with and is adapted to abut against the ball, a wad being employed in front and rear of the ball, and a solid wad interposed between the rear wad and the powder. By this construction the ball will be centered and discharged true and effective.

Referring to the drawings, A represents the wad, which is formed of a disk of suitable material, with a central opening, *a*, being thus of the form of an annulus. When the wad is used without a cartridge, powder is poured into

the barrel and a solid wad, B, introduced thereagainst. A wad, A, is then driven in against the wad B, the ball (shown spherical) next applied, and another wad A forced against the ball, it being noticed that the opening at either end of the wad is adapted to be placed next to the ball.

For cartridges, the powder, wads, and ball are applied to the shell in a manner similar to that described above, and it will be seen that in either case the ball is centered in front and rear, and thus caused to be discharged true and effective.

In cases where a conical ball is employed the annular wad is applied to the point of the ball, and the force employed in thus applying the wad serves to center the ball similar to a spherical ball.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with a spherical ball, of wads of the form of annuli, each having a cylindrical opening, and one in front and the other in the rear of said ball, and a solid wad behind the rear wad, and the shell, substantially as and for the purpose set forth.

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Witnesses:

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