

(No Model.)

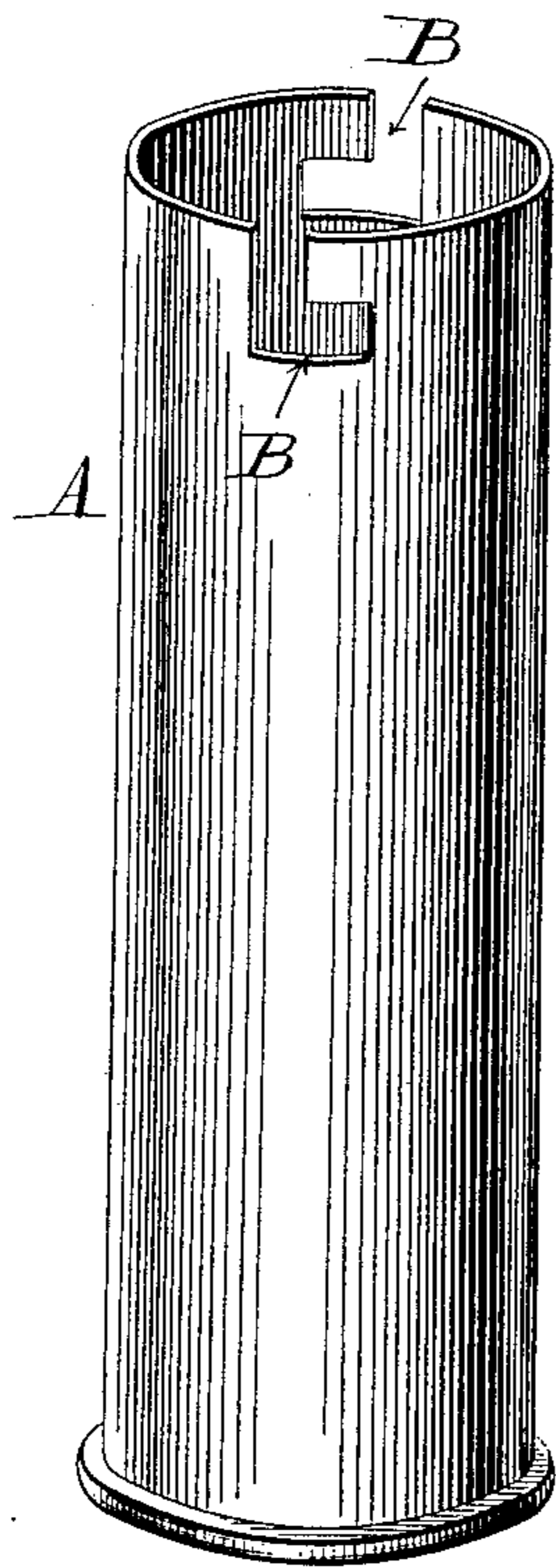
A. W. COCHRAN.

CARTRIDGE.

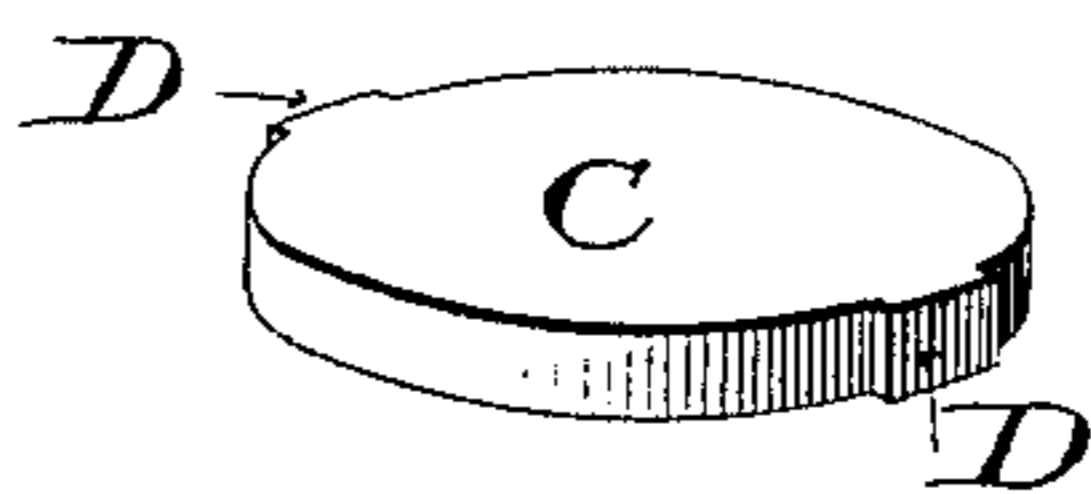
No. 387,493.

Patented Aug. 7, 1888.

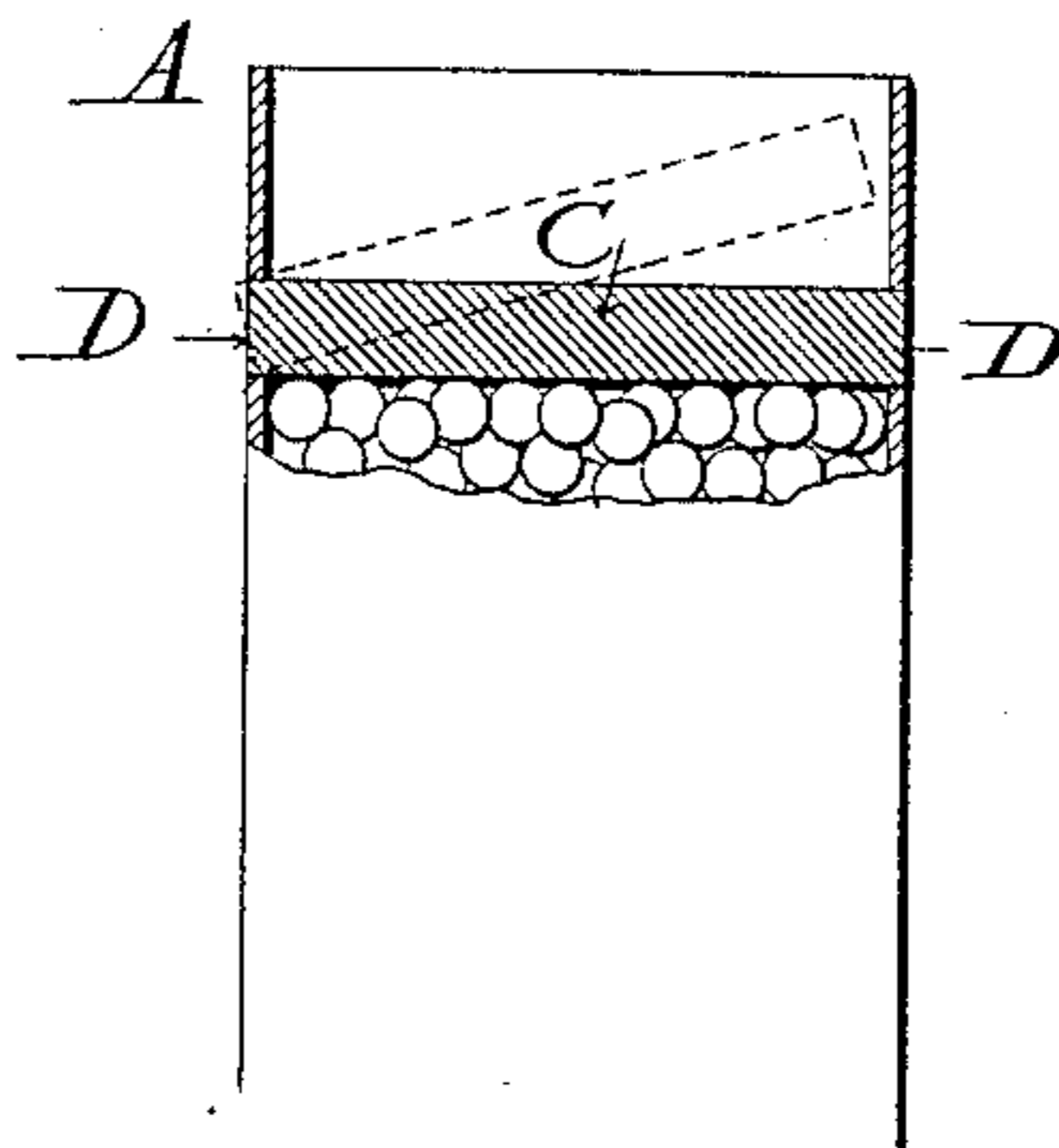
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*

*James F. DuHamel*  
*Horace A. Dodge.*

*Inventor:*

*A. W. Cochran,*  
*by Dodge & Sons,*  
*Attys.*

# UNITED STATES PATENT OFFICE.

ALFRED W. COCHRAN, OF WASHINGTON, DISTRICT OF COLUMBIA.

## CARTRIDGE.

SPECIFICATION forming part of Letters Patent No. 387,493, dated August 7, 1888.

Application filed June 5, 1888. Serial No. 276,102. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED W. COCHRAN, of Washington, in the District of Columbia, have invented certain new and useful Improvements in Cartridges, of which the following is a specification.

My invention relates to cartridges, and has reference to a novel means of securing the wad in place, as hereinafter more fully set forth and claimed.

In the drawings, Figure 1 is a perspective view of a cartridge-shell constructed in accordance with my invention; Fig. 2, a perspective view of the wad which I prefer to employ, and Fig. 3 a vertical sectional view showing the wad in place.

The object of my invention is to do away with the necessity of crimping the paper shells, now commonly done, and to maintain the wad in proper place with certainty without unduly increasing the cost of manufacturing the shell.

A indicates the shell, which is provided near its mouth or open end with slots or openings B, as clearly shown in Fig. 1, the said openings preferably being elongated circumferentially or at right angles to the length of the shell.

It is obvious that the exact arrangement of the openings B, as well as their size, are matters that are capable of considerable variation, and I do not wish to be understood as limiting myself to any particular size of opening, nor to any special form of the same.

While in the drawings I have shown the shell provided with two openings arranged diametrically opposite to each other, it is obvious that the number may be varied, the construction shown being preferred, however, as it gives a better hold upon the wad than where only one opening is used, and does not weaken the shell, as would be the case were a number of such openings made.

The wad C is provided with short tongues or projections D, which extend beyond the periphery of the wad proper a distance equal to the thickness of the shell, as shown in Figs. 2 and 3.

To insert the wad, one of its tongues or pro-

jections D is inserted into or through one of the openings B in the shell, the wad occupying an inclined position relatively to the latter, as shown by dotted line in Fig. 3. Now, by pressing down upon the upper face of the wad the tongue or projection D opposite to the tongue that is shown inserted will be compressed slightly, and as soon as it reaches a horizontal position it will expand into and fill the opening B in the shell, as shown by full lines in Fig. 3.

In order that the insertion of the wad may be rendered easier, one of the openings B will advisably be made with a branch or extension terminating at the edge or end of the shell, as shown in Fig. 1, thereby forming an angular slot or opening. With this arrangement it will be seen that after the wad C reaches the bottom wall of the opening or slot in the shell it is only necessary to turn said wad slightly, so as to bring its tongue or projection into the lateral part of the slot or opening.

It is obvious that only one of the slots or openings B need be made angular, and I do not wish to limit myself to a shell in which both of the slots have open ends or are made angular. It will also be noticed that my shell, both on its interior and exterior, is perfectly smooth and plain, there being no projections of any description whatsoever to interfere with the insertion of the cartridge into the gun.

I am aware that a cartridge-shell has been provided with circumferential corrugations to hold the wad in place, and to such a construction I make no claim.

Having thus described my invention, what I claim is—

1. As an improved article of manufacture, a cartridge-shell provided with an opening or slot in its wall near its mouth, said opening being adapted to receive and seat the periphery or edge of a wad and to hold said wad in place.

2. In combination with a shell provided with an opening or slot (one or more) in its wall, a wad provided with a projection on its periphery to fit the opening on the shell.

3. In combination with a shell, A, provided

with angular openings B B in its walls, a wad, C, provided with tongues or projections D D, adapted to fit into the openings B B.

4. A cartridge-shell provided with an angular opening or slot in its wall near its mouth, said opening being adapted to receive and seat the periphery or edge of the wad and hold the latter in place.

In witness whereof I hereunto set my hand in the presence of two witnesses.

ALFRED W. COCHRAN.

Witnesses:

J. W. ALLEMONG,  
A. W. MICHAEL.