

(No Model.)

H. W. LIBBEY.
CARTRIDGE SHELL.

No. 339,306.

Patented Apr. 6, 1886.

FIG. 1.

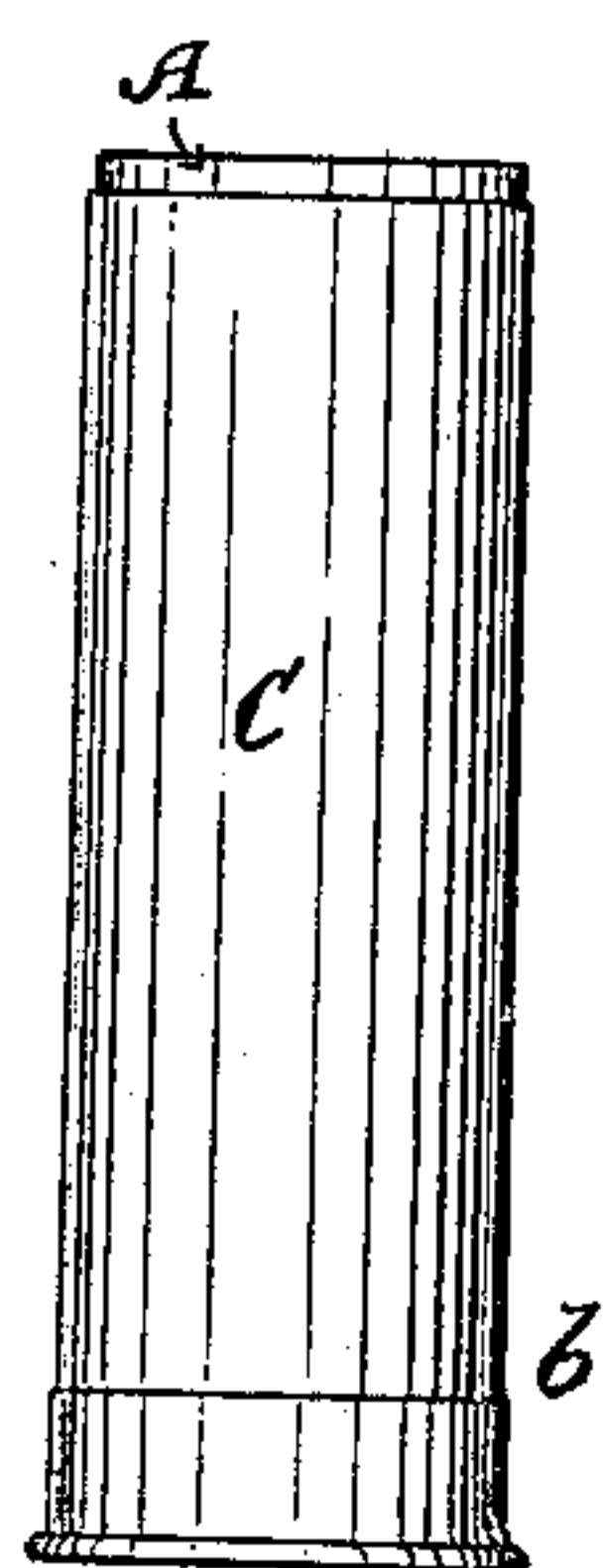
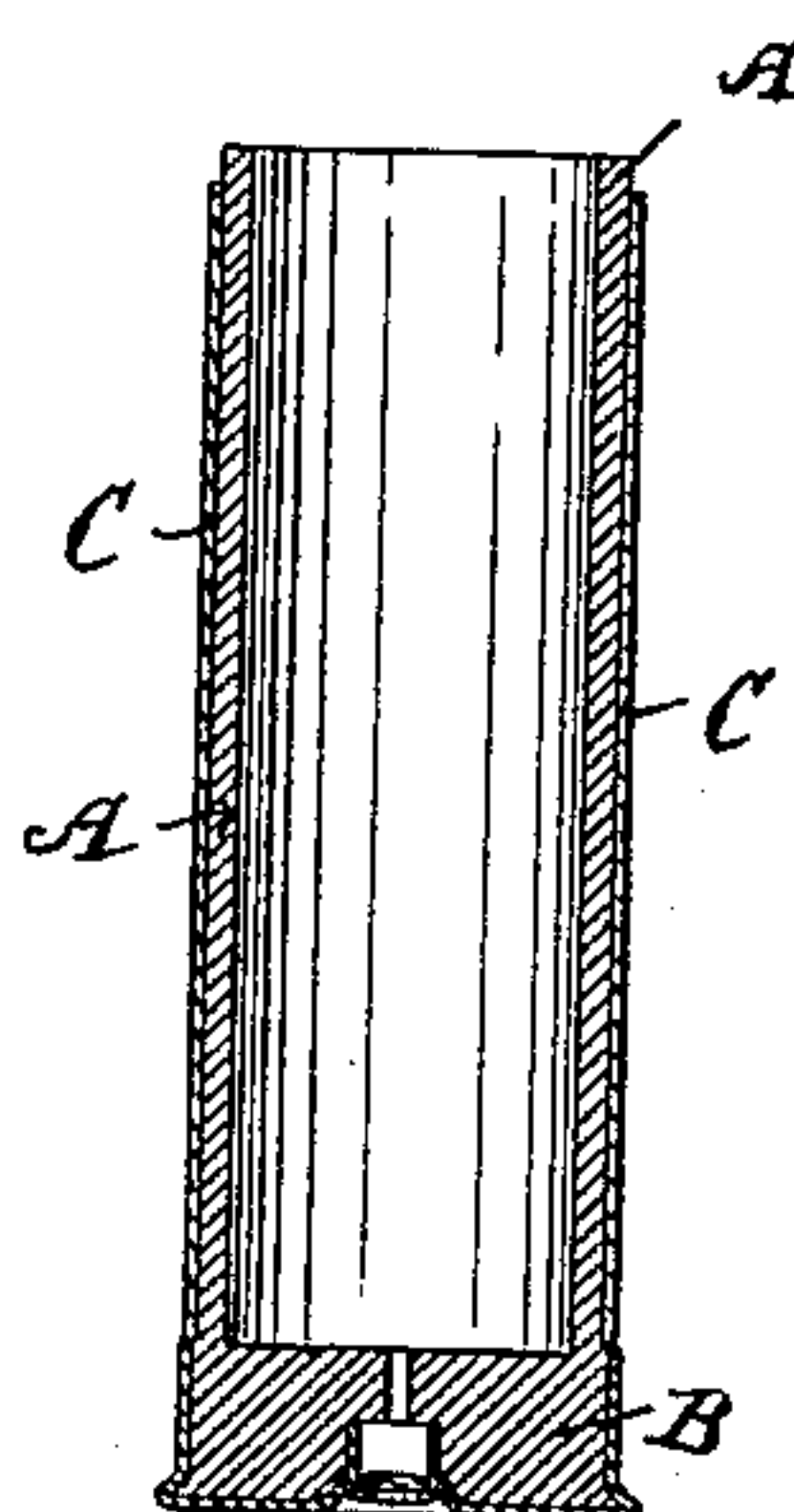


FIG. 2.



Witnesses.

E. Blanka.

Wm. S. Deland.

Inventor.

H. W. Libbey.

by J. H. Adams
Attorney.

UNITED STATES PATENT OFFICE.

HOSEA W. LIBBEY, OF BOSTON, MASSACHUSETTS.

CARTRIDGE-SHELL.

SPECIFICATION forming part of Letters Patent No. 339,306, dated April 6, 1886.

Application filed July 20, 1885. Serial No. 172,059. (No model.)

To all whom it may concern:

Be it known that I, HOSEA W. LIBBEY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Cartridge-Shells for Breech-Loading Guns, of which the following is a specification.

The object of my invention is to provide a means for checking the overflow and recoil of gas that passes out of the mouth of cartridge-shells, and preventing the escape of gas and smoke in the discharge of the shells for breech-loading guns, and save such gas as a part of the force to propel the contents of the shell.

The invention consists of a covering or coating placed on the outside of an ordinary cartridge-shell, whether of paper or metal, and consisting of a material having a rough or fuzzy exterior surface—such as flannel, flocking, wood-fiber, or other suitable substance—to serve as a packing between the shell and the chamber of the gun.

In the accompanying drawings, Figure 1 represents a cartridge-shell with my invention applied. Fig. 2 is a longitudinal section of the same.

A is a cartridge shell, of ordinary construction, having the ordinary closed base and flange as manufactured for breech-loading guns. B is the base-piece, and C is a covering surrounding the shell. This covering consists of a material having a rough or fuzzy surface—such as flannel, flocking, wood-fiber, or any other suitable material—and serves as a packing between the shell and the chamber of the gun.

My invention may be applied to any cartridge-shell already manufactured, whether of metal or paper.

In a metallic shell the coating or covering is applied and connected by any suitable gum sizing.

In a paper shell the coating may be applied in the same way, or it may be applied in sheet form as the last or outside layer in the process of manufacture.

The material above named forms a complete packing from the mouth of the shell to its base, and will prevent the gas from penetrating beyond about one-half an inch below the mouth of the shell, an effect which will not be produced when the gas is forced between two smooth surfaces—that is, the smooth surface of the cartridge-shell and the chamber of the gun.

I am aware that a compound cartridge-case has been used composed of metal and cloth, as in Patent No. 29,080, and also one composed of thin wrapped sheet metal inclosed within a wrapping of paper or thin wrapped metal alone, the metal having an internal and external lining of paper. These I do not claim; but

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

The combination, with a cartridge-shell having the ordinary closed base as adapted for breech-loading guns, of an external coating of material having a fibrous or fuzzy surface, as described, said coating being firmly secured to the shell and extending forward from the flange or base nearly to the front of the shell, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

H. W. LIBBEY.

Witnesses:

J. H. ADAMS,
E. PLANTA.