(No Model.)

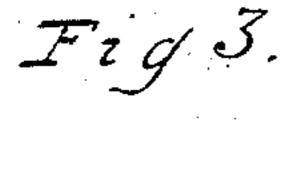
O. F. SEIBOLD.

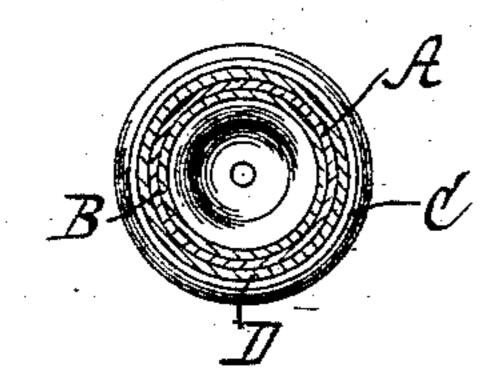
CARTRIDGE SHELL.

No. 294,280.

Patented Feb. 26, 1884.

Frg.1





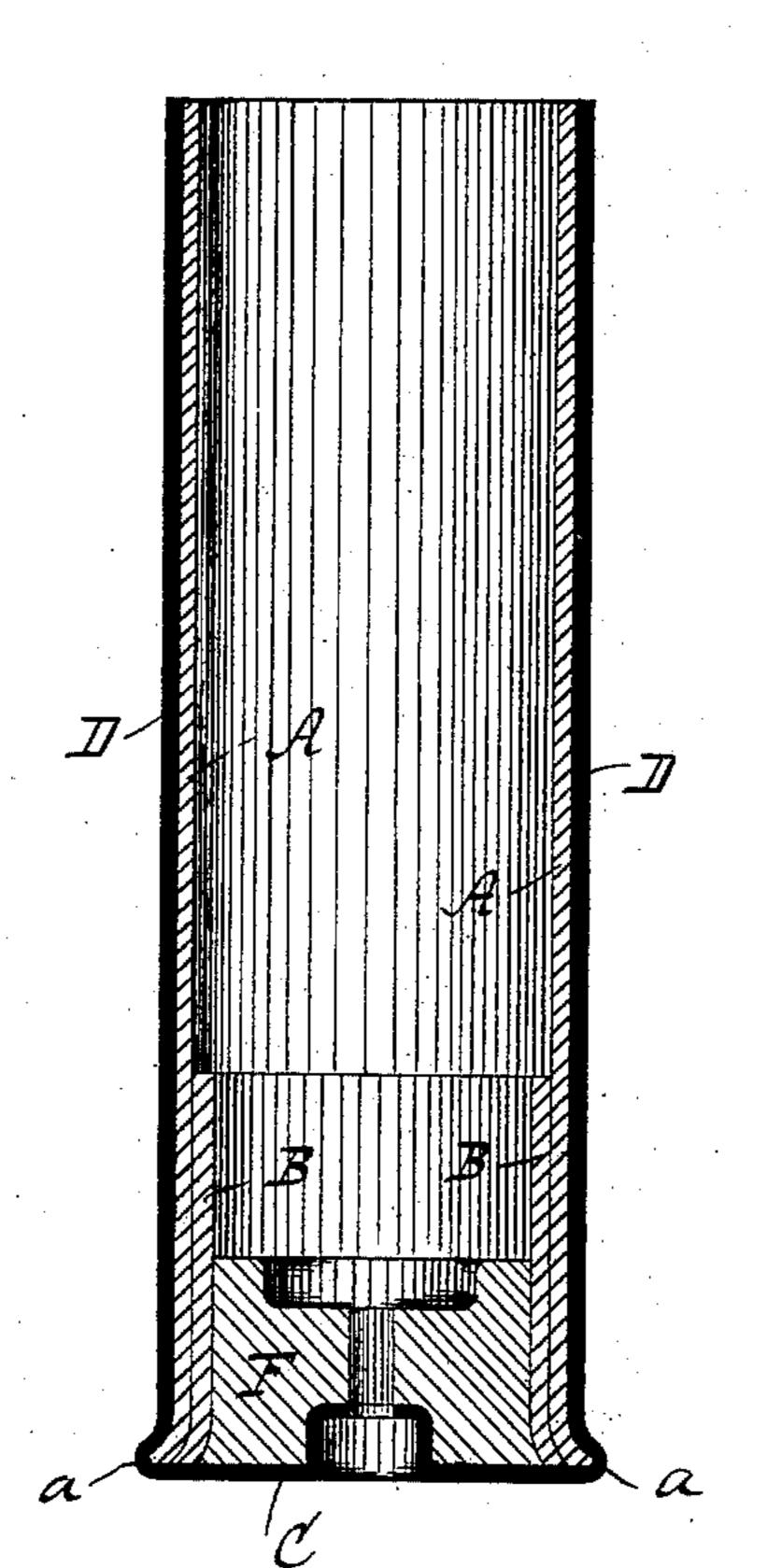
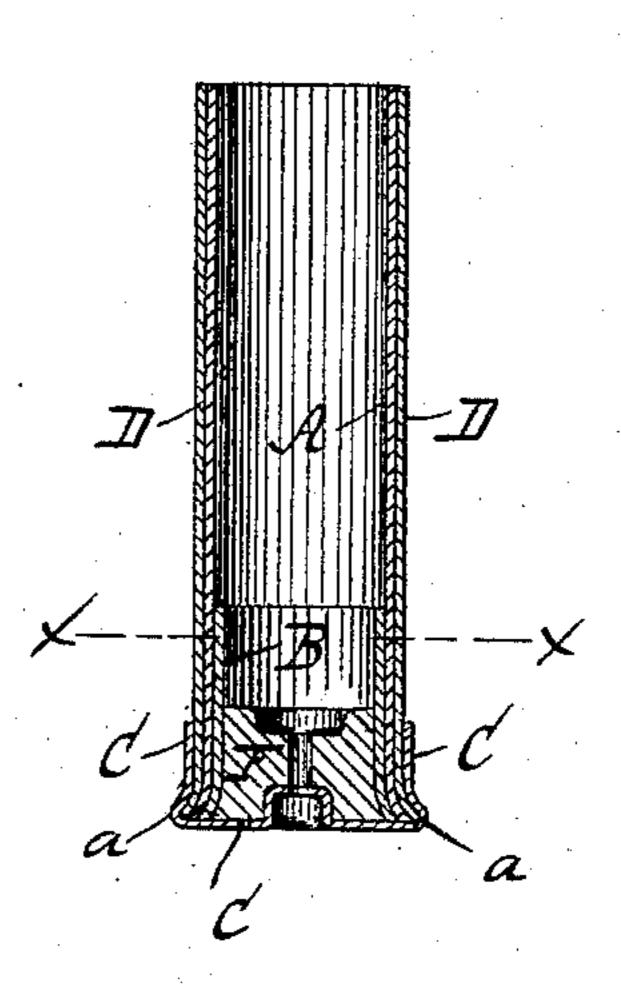


Fig. 2



WITNESSES:

Hilliam Miller Otto Nufelous INVENTOR

Ozto Ferdinand. Seibold

ΑΨΨΩΡΝΈΔα

United States Patent Office.

OTTO FERDINAND SEIBOLD, OF BROOKLYN, NEW YORK.

CARTRIDGE-SHELL.

SPECIFICATION forming part of Letters Patent No. 294,280, dated February 26, 1884.

Application filed December 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, Otto Ferdinand Sei-Bold, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Cartridges, of which the following is a specification.

This invention consists in the combination, with the body of a paper shell and with its re10 enforcement, its base, and metallic head, of a
tube which embraces the body and the base of
the shell, so as to protect the same against
swelling in damp weather, and to prevent the
shell from bulging outward in crimping.

represents a longitudinal central section of my cartridge on an enlarged scale. Fig. 2 is a similar section of a modification on a smaller scale than the previous figure. Fig. 3 is a transverse section of the same in the plane x x, Fig. 2.

Similar letters indicate corresponding parts. In the drawings, the letter A designates the body of a paper shell of the ordinary construction. B is the re-enforcement, and F is the base, both of which parts are also made of paper or of any other suitable material; and C is the head, which is struck up of sheet metal or other suitable material in such a manner as to form a bead, a, which retains the lower edges of the body and of the re-enforcement.

With this shell I have combined a tube, D, which embraces the entire body A and the reenforcement B. In the example shown in Fig. 35 1, this protecting tube is made in one piece with the head C; but said tube may be made separate from the head, as shown in Fig. 2. The protecting tube is by preference made of metal—such as sheet-brass—and when it is made separate from the head it extends clear down and is retained by the bead a of the head, Fig. 2, so that all the parts of the shell are firmly connected.

By the combination of the protecting-tube with the ordinary paper shell, the following important advantages are gained: The shell is rendered water-proof and gas-tight. The body A of the shell is prevented from swelling in damp weather, or in shooting water-fowl, and

it does not bulge out in crimping; and, finally, 50 in my shell all the parts are firmly connected, so that it can be reloaded many times. In other words, my shell combines all the advantages of a metallic cartridge and of a paper cartridge.

I am aware of the cartridge described in the patent of B. D. Wilson, No. 164,894, dated June 22, 1875, being the sole owner of said patent. This cartridge consists of an ordinary metallic cartridge and of a paper lining, and 60 apparently it has the same advantages as my new cartridge; but such is not the fact. In the first place, the cost of ordinary metallic cartridges—such as called for by Wilson's patent—is from four to seven cents apiece, while 65 paper cartridges—such as I use in carrying out my invention—cost less than one cent apiece. (They are at present sold at ninety cents per hundred.) In the second place, the paper lining of Wilson, after having been in- 70 serted into the metallic shell, is retained simply by friction, and it is liable to be driven out, together with the charge, and in all cases it is destroyed after a few shots, so that it must be renewed. For these reasons I have been 75 unable to do much business with Wilson's cartridges, while those constructed according to my invention find a ready market.

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

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1. The combination, with the body of a paper shell, and with its re-enforcement, its base, and its metallic head, of a protecting-tube which embraces the body and the base of the shell, substantially as and for the purpose de-85 scribed.

2. The combination, with the body of a paper shell, and with its re-enforcement and base, of a metallic head embracing the entire body and the base of the shell, substantially as and 90 for the purpose set forth.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

OTTO FERDINAND SEIBOLD. [L. s.] Witnesses:

W. HAUFF, E. F. KASTENHUBER.