

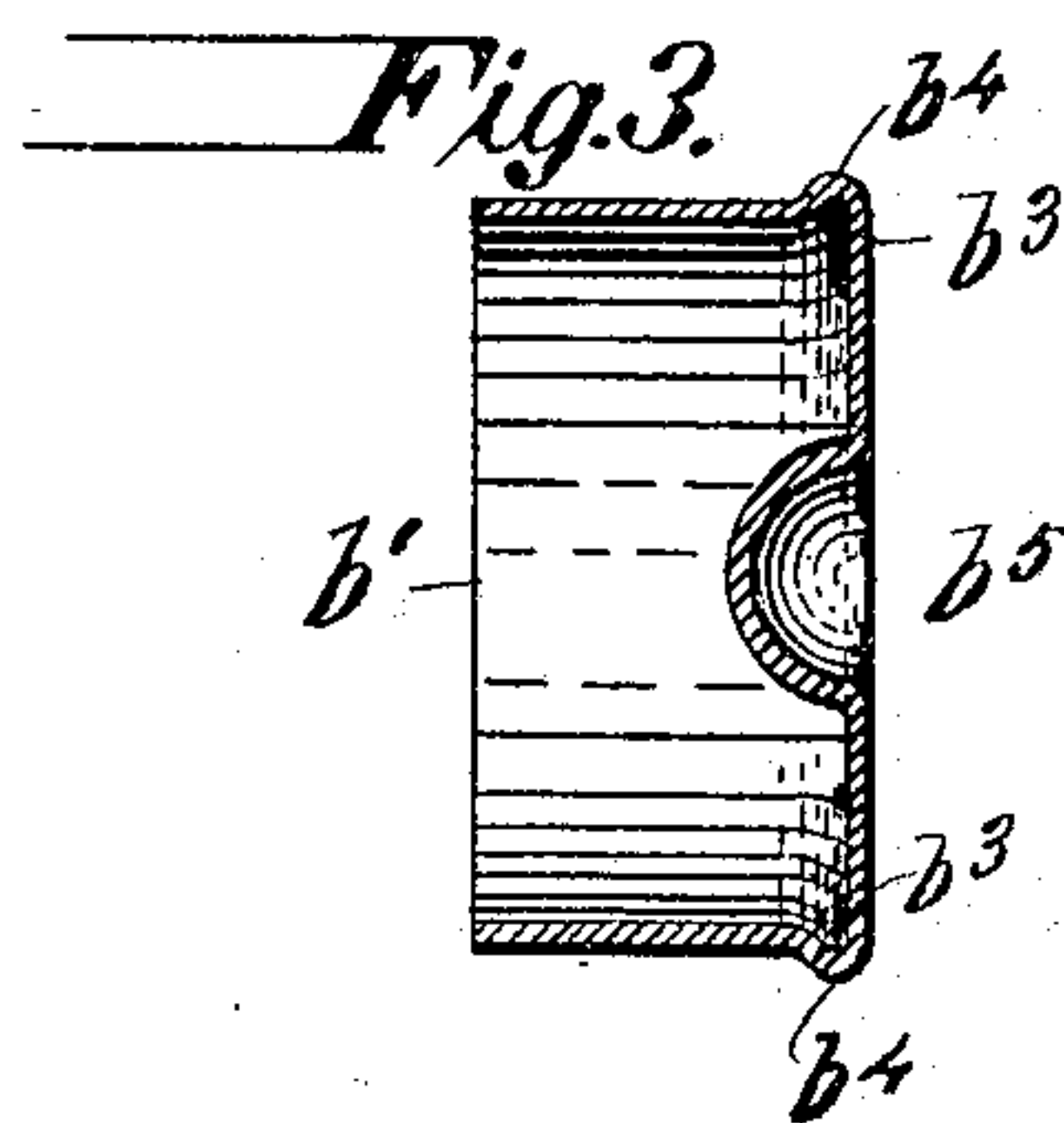
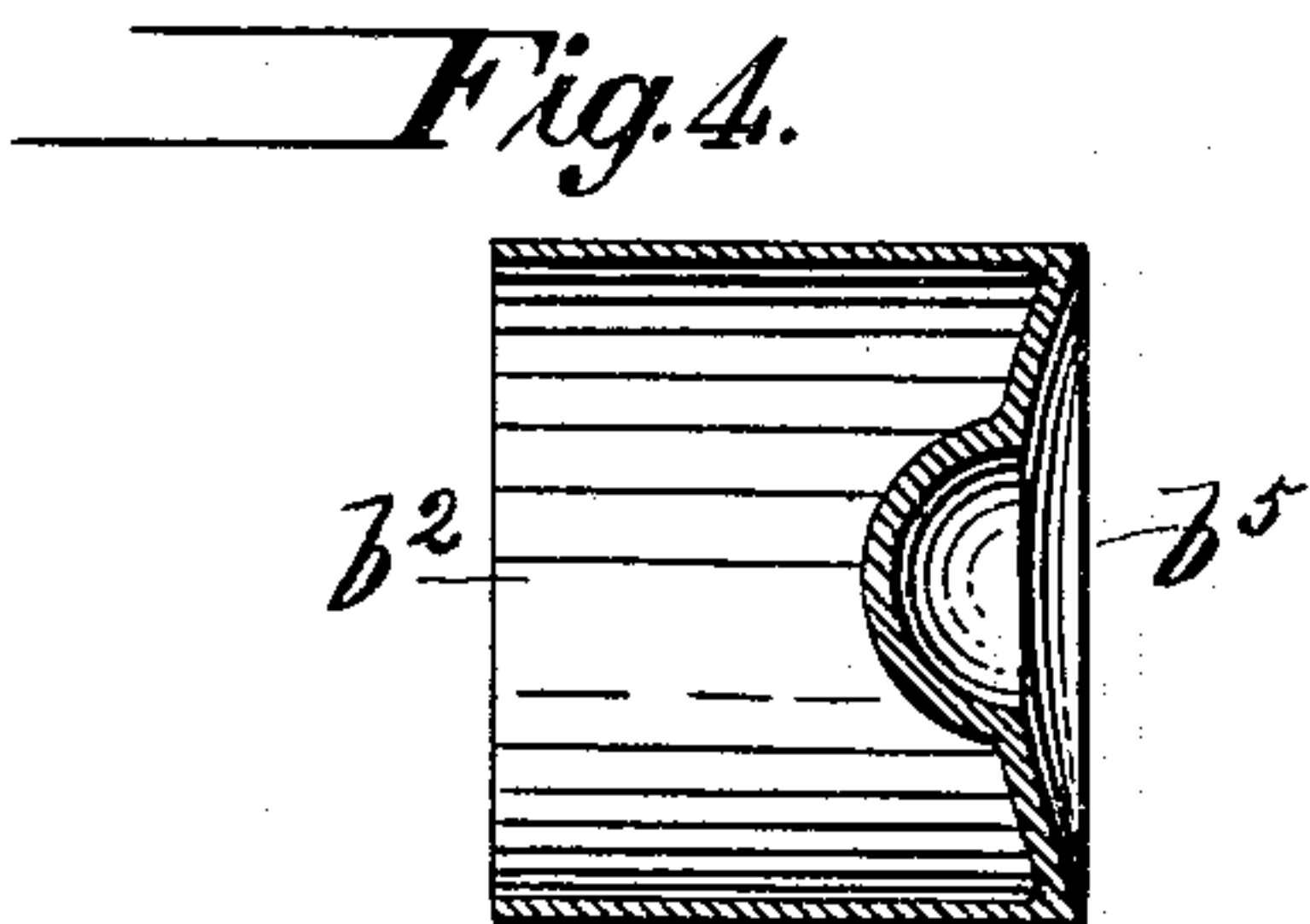
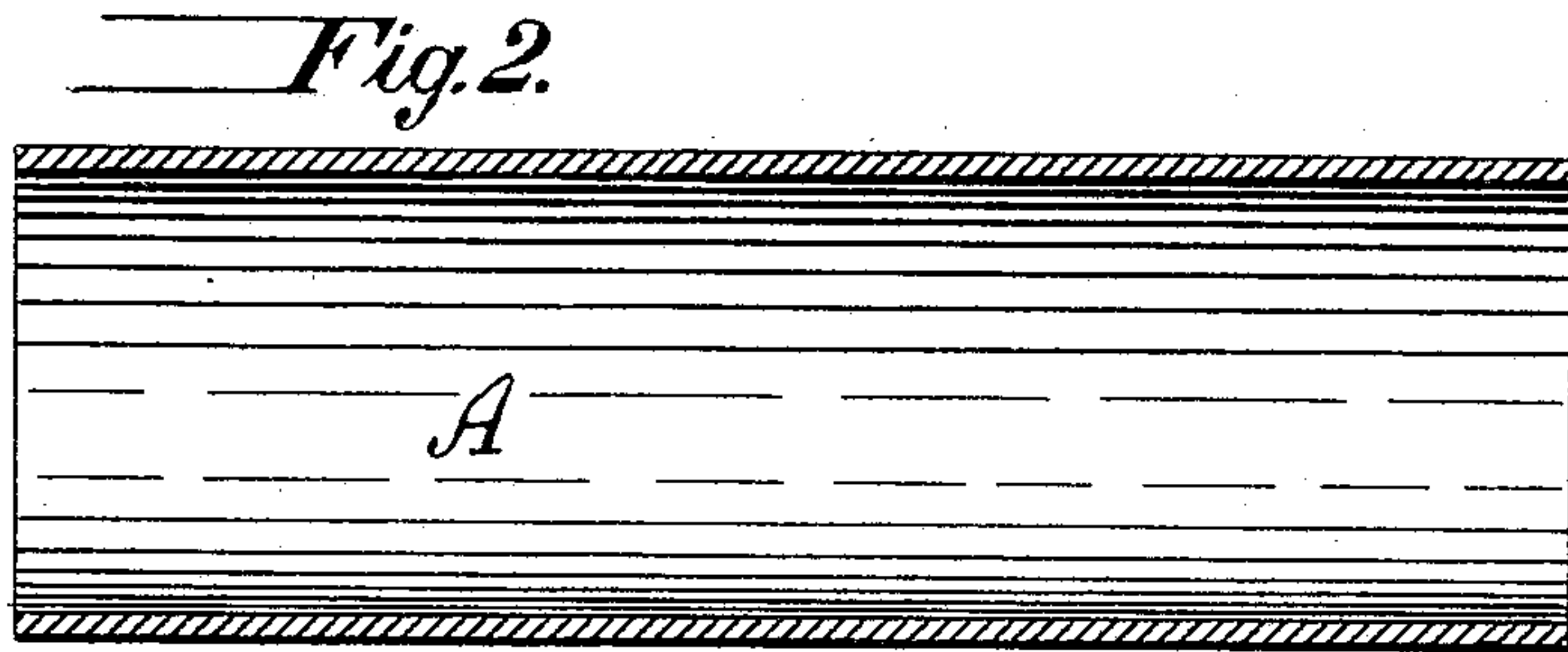
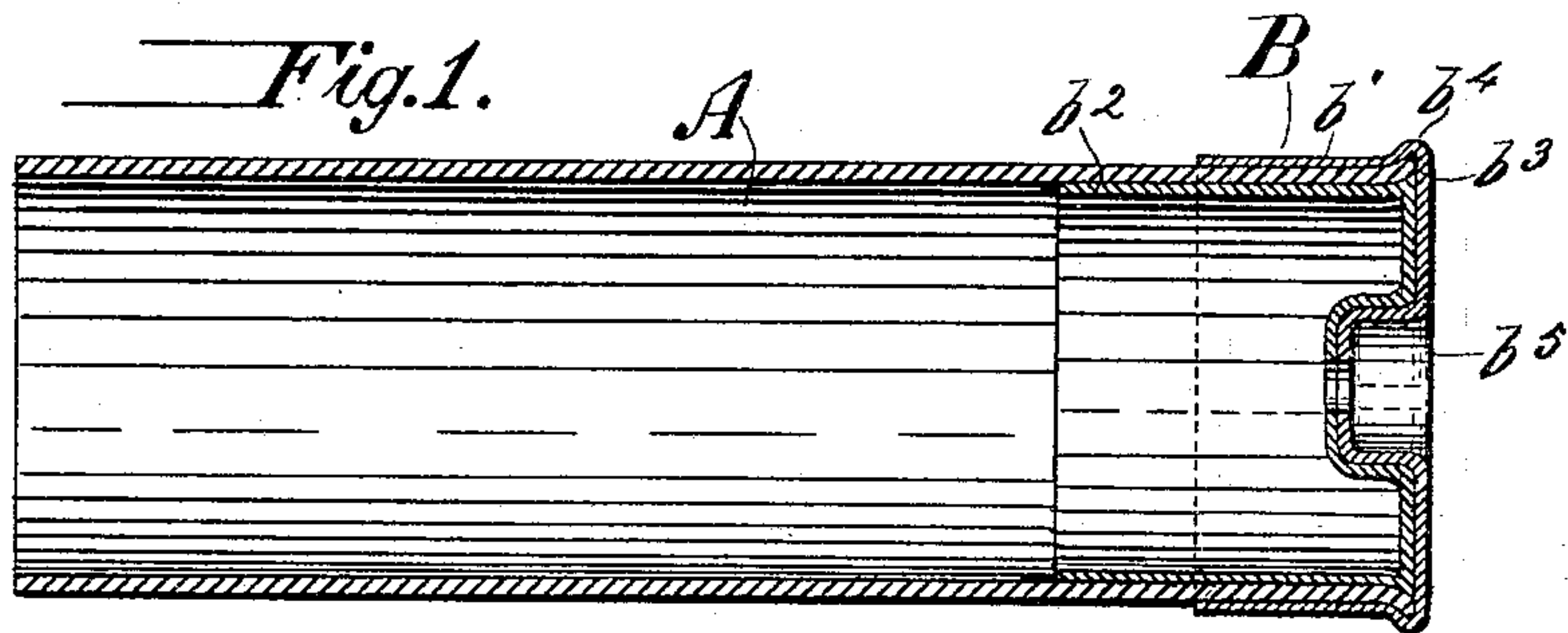
No. 610,660.

Patented Sept. 13, 1898.

C. E. OVERBAUGH.
CARTRIDGE SHELL.

(Application filed Mar. 19, 1894.)

(No Model.)



WITNESSES:
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UNITED STATES PATENT OFFICE.

CHARLES E. OVERBAUGH, OF BAYONNE, NEW JERSEY.

CARTRIDGE-SHELL.

SPECIFICATION forming part of Letters Patent No. 610,660, dated September 13, 1898.

Application filed March 19, 1894. Serial No. 504,138. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. OVERBAUGH, of Bayonne, in the county of Hudson and State of New Jersey, have invented a certain new and useful Improvement in Cartridge-Shells, of which the following is a specification.

This invention relates to cartridge-shells for breech-loading guns and to cartridge-shells of this class when made of a metal breech-piece and a body of paper or similar material.

The object of my improvement is to afford a simple and efficient means for securing the metal breech-piece to the body.

The improvement involves the use of two cylindric caps, or, in other words, two cylinders which are closed at one end and are of such relative size that one may be inserted in the other. The outer cylinder is provided with an internal circumferential groove or recess near its closed end, and the inner cylinder is constructed so that its closed end will be externally concave. After the insertion of the latter the closed concave end is more or less flattened out to force the edge portion toward the said groove of the outer shell. There is sufficient space between the two shells to accommodate the body, and the outward bending of the inner shell forces the body outwardly into the groove of the outer shell. In this way a very secure joint is formed between the body and the two parts of the breech-piece.

In the accompanying drawings, Figure 1 is a central longitudinal section of a cartridge-shell embodying my improvement. Fig. 2 is a central longitudinal section of the body of the shell. Fig. 3 is a central longitudinal section of the outer cylinder of the breech-piece. Fig. 4 is a central longitudinal section of the inner cylinder of the breech-piece in its original condition.

Similar letters of reference designate corresponding parts in all the figures.

A designates the body of the shell. It may be made of paper or other suitable material and in the usual form.

B designates the breech-piece, which may

be made of metal, as usual. This breech-piece consists of two cylinders or caps b' b^2 , each of which is closed at one end. The outer cylinder b' is provided internally with a circumferential groove b^3 near its closed end. It may have the usual external bead b^4 . The inner cylinder b^2 , in its original condition, is constructed with its closed end or bottom externally concave, as shown in Fig. 4. The cylinders of the breech-piece are of such relative size that the body A may be accommodated between them. After the body and the inner cylinder have been inserted within the outer cylinder the closed end or bottom of the inner cylinder b^2 will be more or less flattened by means of a suitable punch or implement inserted within the body A. The flattening of the bottom of the cylinder b^2 will force outwardly that portion of the cylinder which is at the junction of the side and the closed end or bottom, as may be fully understood by reference to Fig. 1. Thus the body A will be bent outwardly into the groove b^3 of the outer cylinder b' and a very secure union of all the parts will be produced. The two cylinders b' b^2 may have a central chamber b^5 for a cap or fulminate, and the shell may be loaded in any desired manner and with any suitable material.

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

A cartridge composed of an outer cylinder provided with an interior annular groove at the angle of the side wall and the end piece, a cartridge-body, and an inner cylinder, said inner cylinder being provided with a dished end the flattening of which forms an annular shoulder at the angle formed by the side wall and end piece thereof for holding the end of the body in the annular groove of the outer cylinder, substantially as described.

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

CHARLES E. OVERBAUGH.

Witnesses:

ANTHONY GREF,
WM. A. POLLOCK.