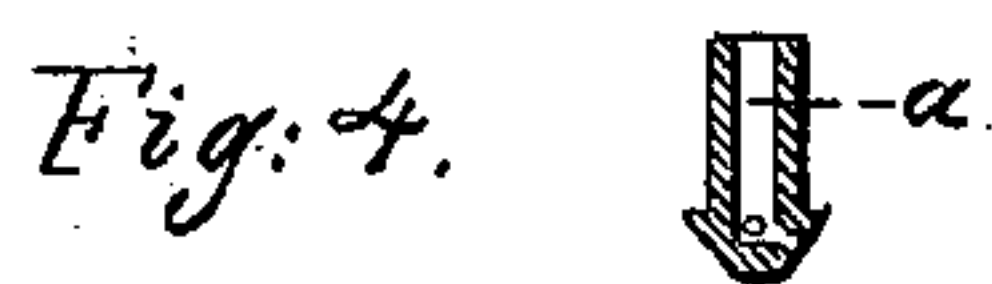
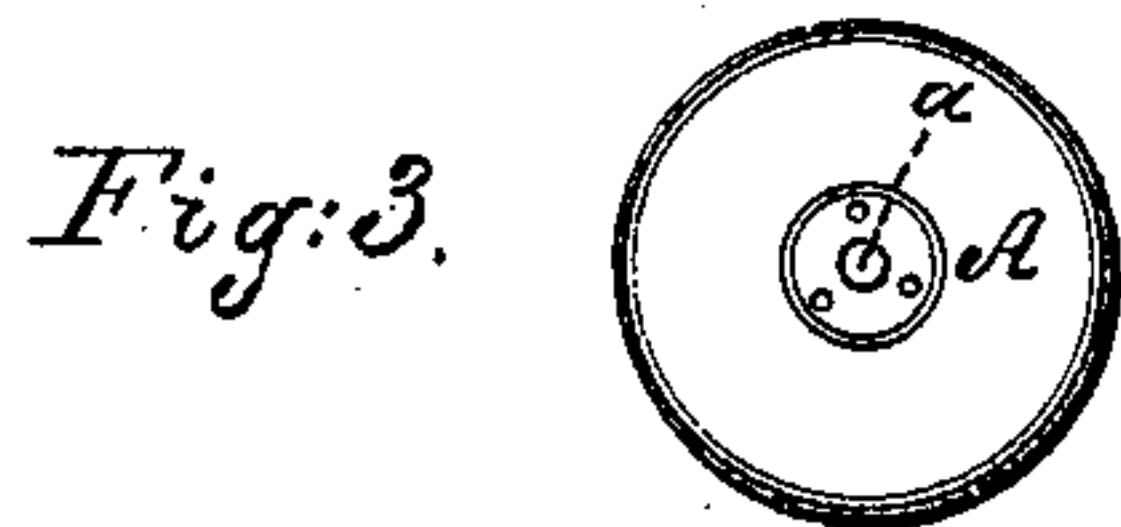
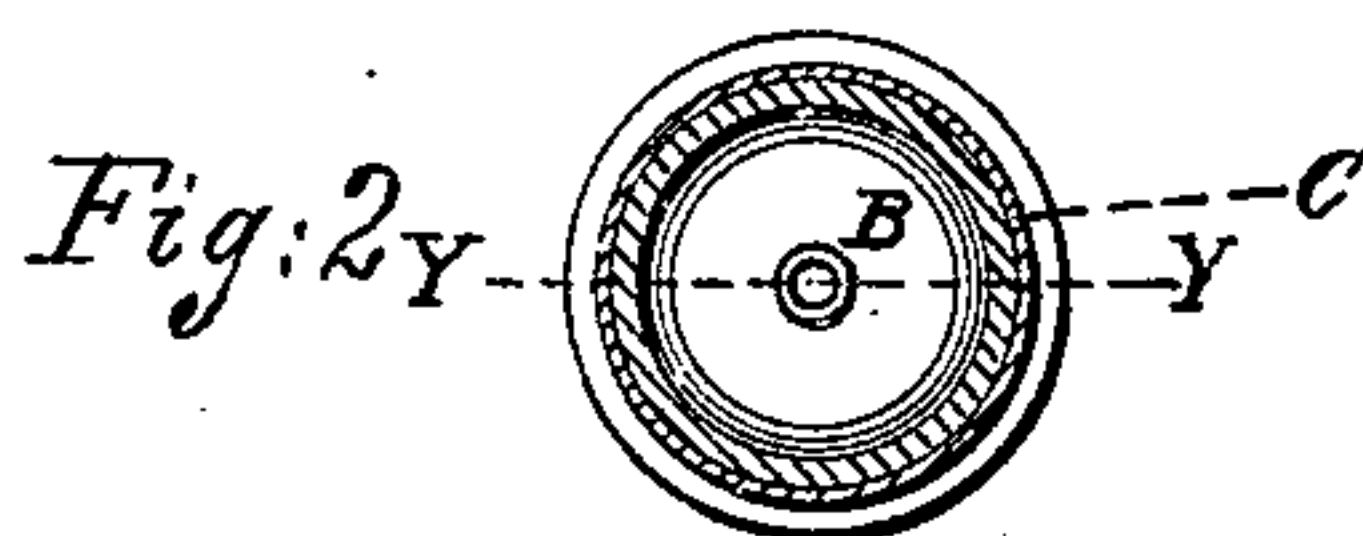
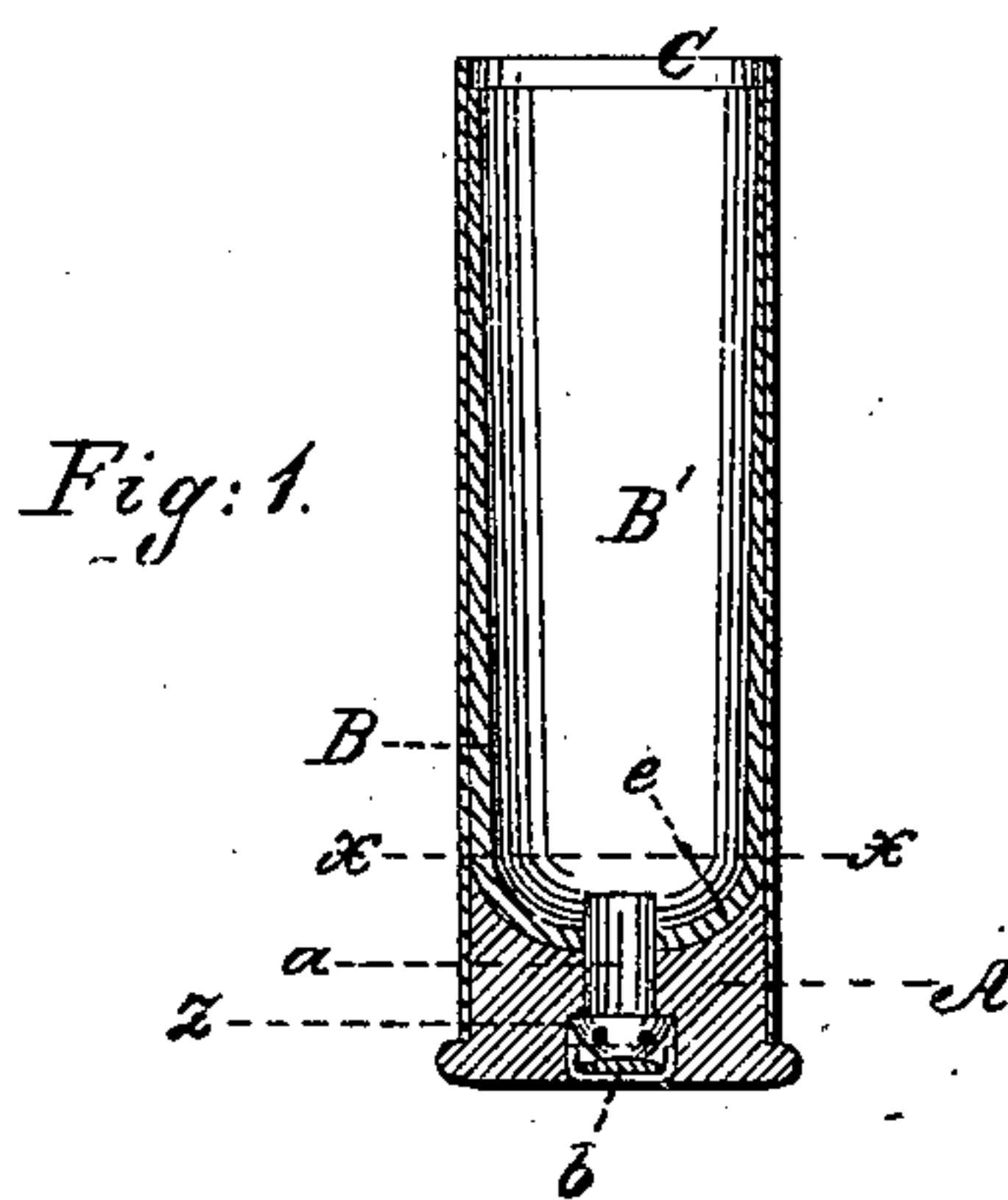


DEPEW & SLATCHER.

Cartridge.

No. 97,615.

Patented Dec. 7, 1869.



Witnesses.
E. W. Anderson
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UNITED STATES PATENT OFFICE.

ABRAHAM C. DEPEW AND JOHN SLATCHER, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN METALLIC CARTRIDGES.

Specification forming part of Letters Patent No. 97,615, dated December 7, 1869.

To all whom it may concern :

Be it known that we, ABRAHAM C. DEPEW and JOHN SLATCHER, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new and valuable Improvement in Metallic-Case Cartridges; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a longitudinal central section of our invention. Fig. 2 is a cross-section of the same taken through the line X X near the base of the chamber. Fig. 3 is a rear view, with cap removed. Fig. 4 is a central longitudinal section of the nipple.

Our invention relates to cartridges for breech-loading fire-arms; and consists, mainly, in the construction and novel arrangement of devices whereby the metallic case is made very strong and firm, and capable of being used many times without detriment to its shape or efficiency.

The case is designed for a center-fire cartridge, and may be thus described: The letter B designates the inner case or lining, made of copper, bronze, or brass, and, at the base, three or four times as thick as the outer cylinder or shell, tapering gradually until at its front edge it becomes of about the same thickness. Thus, while the exterior case is a true cylinder, the bore or chamber of the cartridge is slightly conical. The outer cylinder is lettered on the drawings C, and may be of the same material as the lining. The lining B has a rounded or concave base, with a central circular opening for the admission of the end of the nipple *a*. It extends forward, forming a lining to the whole of that portion of the cartridge in which the charge is placed, but stopping short of the extreme forward edge of the exterior cylinder C by the distance of one-eighth of an inch or less. The forward edge of the interior lining B thus forms a shoulder for the base of the bullet to rest upon, while the thin projecting end of the outer cylinder serves to embrace the base of the bullet and secure it in position. The exterior casing C also extends beyond the rounded base of the lin-

ing B to the rear, and abuts against the flange of the steel base A of the cartridge. The steel base A is made concave in front, and fits accurately the rounded base of the lining B, filling the cavity formed by the projection of the rear end of the exterior case C. The base is formed with a stout flange, against which abuts the rear end of the outer case. For the reception of the nipple *a* an opening is formed through the steel base A, being a prolongation of the opening in the base of the lining B. At a distance a little more than one-eighth of an inch from the base of the cartridge this opening becomes wider, a shoulder, *z*, being formed, upon which rests the shoulder of the nipple *a*. The nipple *a* is a cylindrical tube for the first two-thirds of its length, then expands exteriorly, forming a shoulder, from which it slopes back in the form of a truncated cone, the solid imperforate end of which serves as an anvil for the explosion of the cap *b*. The fire of the cap communicates with the interior of the nipple by means of three small openings *c c*, equidistant from each other through the beveled sides of the truncated cone. The cap *b* has a rounded base filled with percussion-powder, and a short flange, the exterior surface of which accurately fits the opening in the base of the cartridge.

What we claim as our invention, and desire to secure by Letters Patent, is—

The metallic cartridge-case herein described, having an interior case or lining, B, with conical chamber B', and concave base *e*, and a thin external shell, C, secured to a steel base, A, with concave front perforated centrally, and having a shoulder, *z*, to receive and support a removable nipple, *a*, having three firing apertures, constructed and arranged to operate as specified.

In testimony that we claim the above, we have hereunto subscribed our names in the presence of two witnesses.

ABRAHAM C. DEPEW.
JOHN SLATCHER.

Witnesses:

DAVID B. LOCKWOOD,
ROBERT E. DE FOREST,
FLOYD C. SHEPARD,
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