

E. PEIRCE & S. EGGERS.

CARTRIDGE.

No. 185,835.

Patented Jan. 2, 1877.

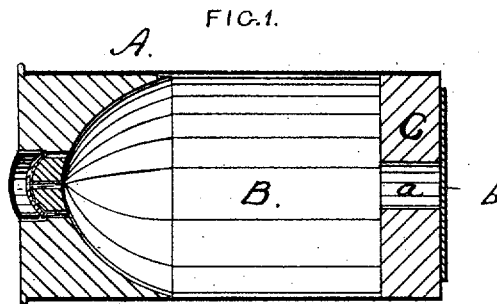


FIG. 2.

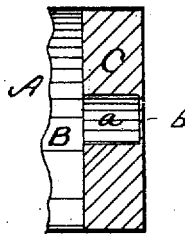
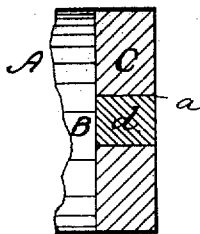


FIG. 3.



WITNESSES.

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# UNITED STATES PATENT OFFICE.

EBEN PEIRCE AND SELMAR EGGERS, OF NEW BEDFORD, MASS.

## IMPROVEMENT IN CARTRIDGES.

Specification forming part of Letters Patent No. **185,835**, dated January 2, 1877; application filed October 13, 1876.

*To all whom it may concern:*

Be it known that we, EBEN PEIRCE and SELMAR EGGERS, of New Bedford, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Metallic Cartridges, of which the following is a specification:

This invention relates to metallic cartridges more especially intended for use in connection with the discharge of bomb-lances, so called—as, for instance, such a lance as is shown and described in the schedule annexed to the Letters Patent issued to R. Sibley, August 17, 1858, numbered 21,219.

The invention consists, in substance, in the construction (hereinafter described) of the outer head or wad of the metallic cartridge, so that the ignition of the powder or other explosive material within the cartridge can communicate with the fuse of the bomb-lance and ignite it before the lance leaves the gun from which, under the explosion of the cartridge, it is expelled.

The improvements will be fully hereinafter described, and specifically pointed out in the claim.

In the accompanying plate of drawings, Figure 1 is a longitudinal section of a metallic cartridge having the features of this invention; Figs. 2 and 3, sectional views, showing modifications thereof.

In the drawings, A represents a metallic cartridge made (except as to this invention) as ordinarily; B, the chamber for the powder. This chamber B is closed at its outer end by a wad or head, C, of leather, paper, or wood, or other similar material, through which is a passage, *a*, closed by a layer of paper, *b*, or by other similar or suitable material, which, by the ignition of the powder in the cartridge, will be readily and quickly consumed, so that

the ignited or burning powder may communicate with and ignite the fuse or fuses of the bomb-lance before such lance escapes from the gun which is used for its discharge under the explosion of the cartridge A. This paper or other covering or closing material *b* to the hole *a* through the cartridge-wad C, together with the wad, is made proof against the passage of water to the powder by coating the same with shellac, varnish, or other suitable water-proof material.

In lieu of paper thin leather may be used as the closing material for the opening *a* in wad C; and again, the opening may be filled with any material suitable for communicating the ignition of the powder of the cartridge to the fuse of the bomb-lance, as has been stated—as, for instance, tallow, wax, or other similar material, as is shown in Fig. 3 at *d*. Again, the closing-piece *b* for the wad-opening *a* may be a part of the wad C itself—as, for instance, as shown in Fig. 2.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The metallic cartridge A, having the powder-chamber B, in combination with the wad or head C, closing the outer end of the chamber, and constructed with an aperture closed by a suitable material which will readily be consumed by the ignition of the powder in the cartridge, as and for the purpose described.

EBEN PEIRCE.  
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Witnesses:

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