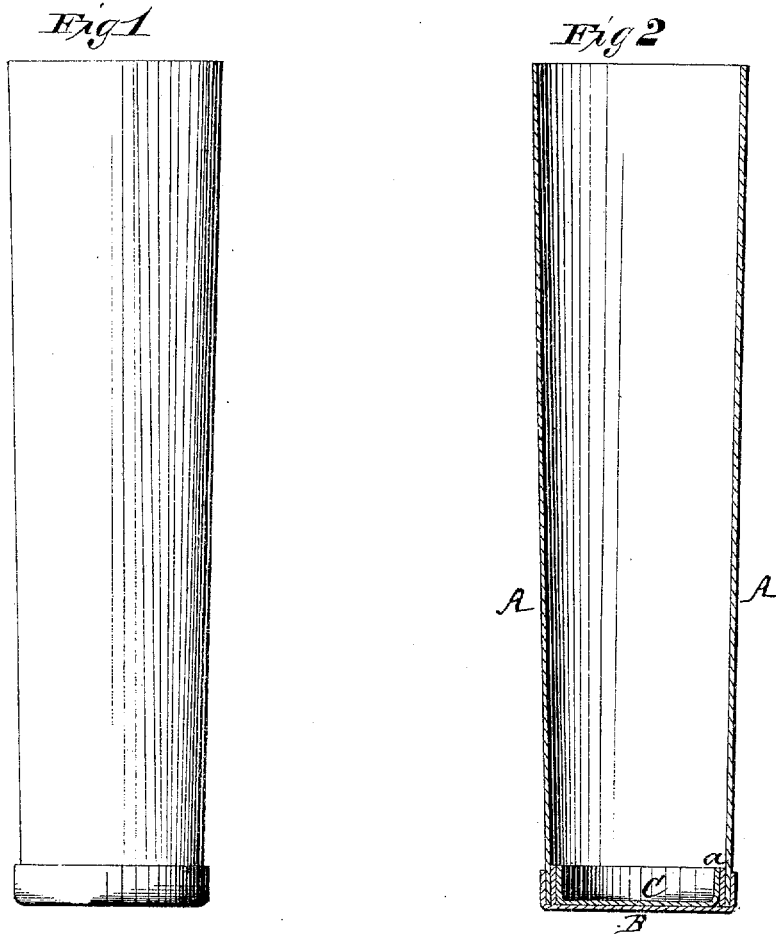


F. W. SMITH & F. EGEE.
Blasting-Cartridge.

No. 168,795.

Patented Oct. 11, 1875.



WITNESSES
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FRIEND W. SMITH AND FREDRICK EGSEE, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN BLASTING-CARTRIDGES.

Specification forming part of Letters Patent No. **168,795**, dated October 11, 1875; application filed September 18, 1875.

To all whom it may concern:

Be it known that we, F. W. SMITH and FREDRICK EGSEE, of Bridgeport, in the county of Fairfield, and in the State of Connecticut, have invented certain new and useful Improvements in Blasting-Cartridges; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in the mode of constructing cartridge-cases for blasting purposes, said cases being made of paper or muslin, or other similar material, combined with metal heads, as will be hereinafter more particularly set forth.

In the accompanying drawings, making part of this specification, Figure 1 represents a side view, and Fig. 2 a longitudinal section, of my cartridge.

In the figures, A represents a tube, made of any suitable length and size, and of paper or muslin, or other similar cheap material. B and C represent two metallic cups, the one made smaller than the other, the smaller one resting in the other. The lower edge of the tube or case A is fitted in snugly between the sides of the outer and the inner case, having a re-enforcement, *a*, or not, as may be desirable. After the bottom of the case is inserted between the cups the metal of the two cups may be pressed, so as to securely hold and retain the same.

By the use of these metal cups we form a solid, substantial bottom for the cartridge, so that when it is inserted in the hole drilled in the stone it cannot be torn or damaged in its descent. The cost added to this construction of cartridge will be very little, while its durability and strength will be greatly increased.

Our invention is intended to improve the commonly-used paper or muslin blasting-cartridge; and, when constructed as hereinbefore described, the ends of the cartridge-case are prevented from tearing, and a stiff base or end is formed to the cartridge, which acts as a guide, and allows it to enter the blasting-orifice without difficulty or danger of destroying it.

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

A blasting-cartridge composed of a cylinder, A, of paper, or muslin, or other like material, and having its lower end confined between the edges of two metallic cups, B C, which have closed bottoms, one cup being within, and the other without, the case A, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 4th day of September, 1875.

FRIEND W. SMITH.
FREDRICK EGSEE.

Witnesses:

WM. DISBROW,
MICHAEL KELLY.