F. W. SMITH & F. EGGE.

BLASTING-CARTRIDGE.

No. 170,600. Patented Nov. 30, 1875.

Fig. 1.

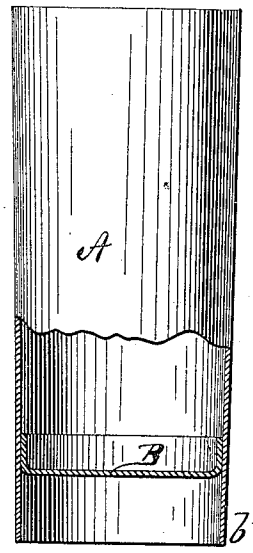
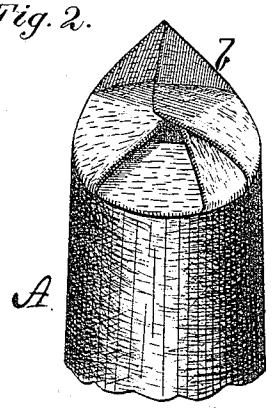


Fig. 2.



WITNESSES

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FRIEND W. SMITH AND FREDRICK EGGE, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN BLASTING-CARTRIDGES.

Specification forming part of Letters Patent No. 170,600, dated November 30, 1875; application filed November 18, 1875.

CASE A.

To all whom it may concern:

Be it known that we, FRIEND W. SMITH and FREDRICK EGGE, 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.

Our invention relates to cartridges for holding powder for blasting purposes; and it consists in the construction of the same, as hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side elevation of the cartridge with the lower end broken away, showing its interior. Fig. 2 is a perspective view of the lower end of the cartridge, with the material partially folded over the interior cup.

A represents a tube made of paper, muslin, or similar light and cheap material. This tube is made slightly tapering in form, the bottom being smaller than the top. B represents a metallic cup, which is made to neatly fit the tube, and is by a suitable instrument forced down into the same, so that when at or near the bottom of the same it will be tightly held in place, and forms the bottom of the cartridge. We prefer to leave the material of which the tube is made to extend slightly below the bottom of the cup, as shown at *b* in Fig. 1, and then carefully fold the material over the bottom of the cup, and there cement or glue the same flat, so as to prevent the end of the tube from becoming torn or separated from the cup when in the act of inserting it in the blasting-orifice. The tube itself may be made impervious to water by any of the well-known processes.

The cup may be made of other material than metal, such as hard rubber, papier-maché, leather, wood, or anything that will have sufficient rigidity.

A patent for a blasting-cartridge is known in which the tube has both an interior and an exterior cup at the end; but we have discovered that a single cup on the interior, when the tube is made on a taper, is sufficient for all ordinary uses, and is less expensive in construction.

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

A blasting-cartridge, made of flexible material in tapering form, having an interior cup of rigid material forced down into the same, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 29th day of October, 1875.

FRIEND W. SMITH.
FREDRICK EGGE.

Witnesses:
C. L. EVERT,
WM. E. DISBROW.