J. V. MEIGS.

Metallic Cartridge.

No. 90,951. Patented June 8, 1869.

FIG. 1.

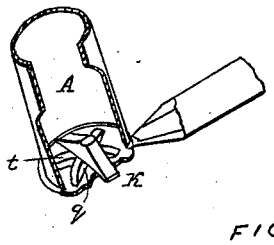


FIG. 3.

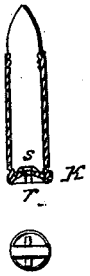
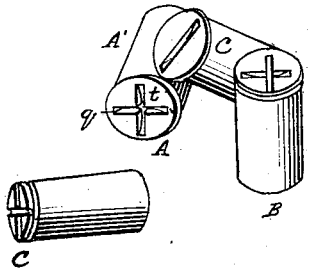


FIG. 2.



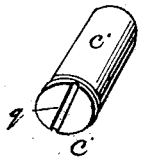


FIG. 4.

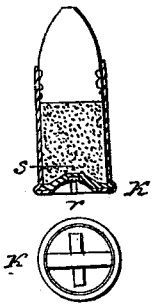
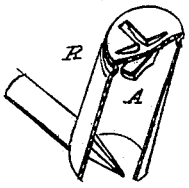


FIG. 5.



WITNESSES:

F. F. Peyton

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INVENTOR.

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Baldwin & Dam

UNITED STATES PATENT OFFICE.

J. V. MEIGS, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN METALLIC CARTRIDGES.

Specification forming part of Letters Patent No. 90,951, *dated June* 8, 1869.

To all whom it may concern:

Be it known that I, J. V. MEIGS, of the city and county of Washington, in the District of Columbia, have invented a new and useful Improvement in Metallic Cartridges, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, which make part of this specification, in which—

Figure 1 represents a view of the interior of the cartridge-case, a part being broken away; Fig. 2, a vertical central section through a filled cartridge without a flange; Fig. 3, a view of the outside of several cases, showing the depressions in the base; Fig. 4, a vertical central section through a flanged filled cartridge; and Fig. 5, a broken cartridge-case, seen from the outside, showing the anvil in part.

It is the object of my invention to render metal cartridges secure against explosion in transportation, or accidental discharge in magazine-guns; and to this end my invention consists in a novel method, hereinafter described, of constructing a metallic cartridge by placing the fulminate centrally in a bar-anvil, securing the anvil in the base of the cartridge-case, and grooving the base from edge to edge, or nearly so.

To carry out the object of my invention, I form the cup A of soft metal, with a flange at the base, as shown in Fig. 4, or without a flange, but with an annular groove, as in Figs. 2 and 3, in any of the most approved modes of spinning or striking up from a disk. The bar-anvil K, of hard metal, is curved so that its ends, which are thinner than it is in the middle, will rest in the flange, as in Fig. 4, or beneath the annular groove, as in Fig. 3, and be held securely. The anvil is punched on its under side to form a cup, *r*, in which the fulminate *s* is deposited. The bottom of the cartridge-case A is a plane surface, and on the outside of this bottom I sink a depression, *q*, or two depressions, *q* and *t*, the one being at a right angle to the other, as shown in Fig. 2 at C′ and A′, and reversed or seen from the inside, as at *q* and *t* in Fig. 1. These depressions are made so as to be left square at their edges, and may extend from one side of the cup to the other, or they may be made so as not to extend entirely across the bottom. In either case, however, they are to be made deeper at the center than at the extremities of the depressions.

When the cartridge is to be fired, a rod to be struck by the hammer enters the point at which the depressions cross, or the center of the single depression, and, by its percussion on the fulminate in the center of the anvil, produces the desired explosion of the cartridge.

Now, when the anvil containing its fulminate is placed within the flange, it is manifest that the case or cup may be charged with ammunition, and that a considerable lateral pressure may be applied to close the upper edge of the cup around the ball without any danger of exploding the fulminate; and it is further obvious that, as the grooves in the bottom of the cup will present a rigid resistance to any body the cartridge may encounter, without striking the fulminate, the danger of explosion in the cartridge from transportation in boxes or otherwise will be almost entirely removed. It is further obvious that when the cartridge so constructed shall be used in magazine-guns, even such as carry one cartridge above another in a tube, the rigid corners of the depressions will prevent the contact of the point of a ball from pressing against the fulminate of the cartridge next it, and thus render this cartridge peculiarly safe for such guns.

I do not, under this application, claim the bar-anvil *per se*.

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

The combination, as set forth, of the bar-anvil with the square-edged depression in the bottom of the cartridge case, constructed, arranged, and operating as and for the purpose set forth.

In testimony whereof I have hereunto subscribed my name.

JOSIAH V. MEIGS.

Witnesses:

WM. D. BALDWIN,

JOS. I. PEYTON.