

J. F. CRANSTON.
Cartridge.

No. 68,960.

Patented Sept. 17, 1867.

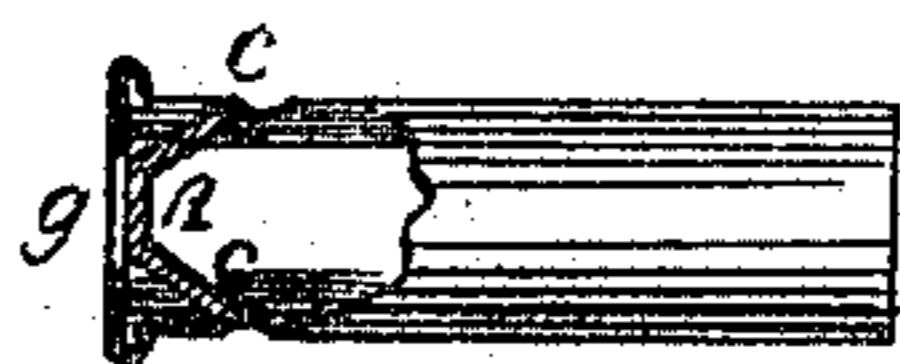


Fig. 1



Fig. 2

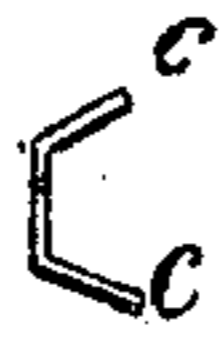


Fig. 3

Inventor

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Witnesses
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UNITED STATES PATENT OFFICE.

JAMES F. CRANSTON, OF SPRINGFIELD, MASSACHUSETTS.

IMPROVEMENT IN PRIMING METALLIC CARTRIDGES.

Specification forming part of Letters Patent No. 68,960, dated September 17, 1867.

To all whom it may concern:

Be it known that I J. F. CRANSTON, of Springfield, Hampden county, Commonwealth of Massachusetts, have invented certain new and useful Improvements in Metallic Cartridges; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to letters of reference marked thereon.

My improvements are in that class of cartridge known as "center-fire;" and consist of an improved form of anvil employed, and in the manner of placing the same in the shell.

In the drawings, Figure 1 is a longitudinal section of a cartridge-shell constructed with my improvements. Fig. 2 is an end view of the same. Fig. 3 shows the form of anvil.

In construction, this shell consists of an ordinary metallic shell, having a depression, *b*, formed in the interior of its rear end for the purpose of containing the fulminate. Over this depression is placed the bar A, of peculiar form, which I will now describe.

This bar is formed of steel, and has the two braces C C' so arranged as to spring under projections formed by the notches or grooves *e e*, so as to hold down the anvil upon the fulminate, thus confining it, except at the points *a f g h*, where, the base of the bar A being square and of less width than the diameter of the circle, the fire from the fulminate

has free communication with the powder in the shell.

In loading this shell, the fulminate is first placed in the depression *b*. The bar A is then crowded down into the shell, and the braces C C' spring under the projection formed by the groove *e* in the shell, thus holding the fulminate and forming an anvil for the same.

The advantage of this bar as an anvil is, that the pressure exerted upon its rear end by the explosion of the fulminate causes lateral expansion of the braces C C', in such a manner that there is no possibility of the anvil being blown out from the cartridge, as may be the case with a plain bar; also, the construction of the base of the bar in connection with the depression in the end of the shell renders the communication of the fulminate with the powder perfectly free and unobstructed; and

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A center-fire cartridge in which the anvil is constructed with a square face, A, and spring-braces C C', fastened in by the flange or groove *e e*, and bridging over the cavity *b* in such a manner as to form the openings *a f g h*, substantially as set forth.

Witnesses: JAMES F. CRANSTON.
EDWARD H. HYDE,
J. B. GARDINER.