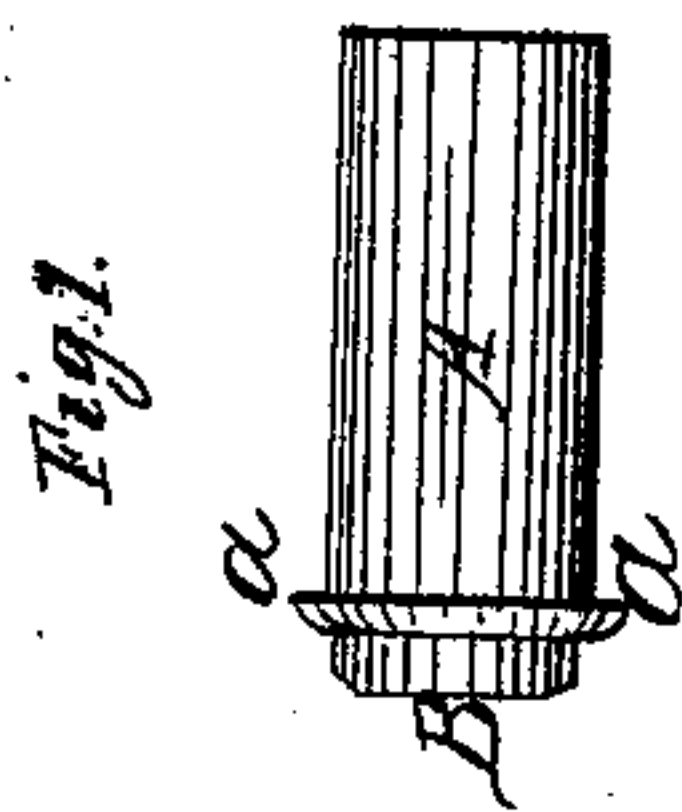
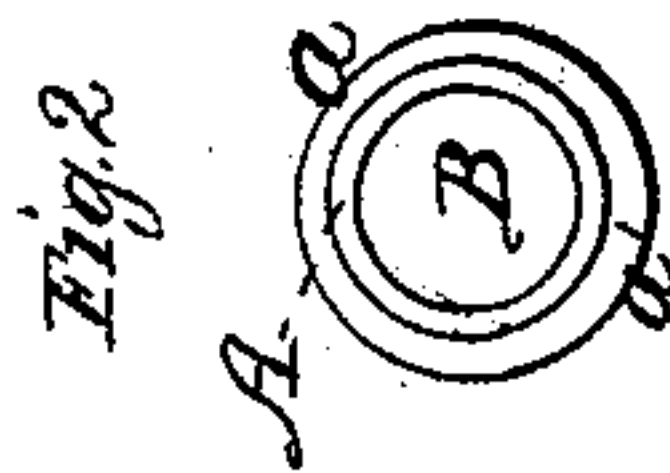
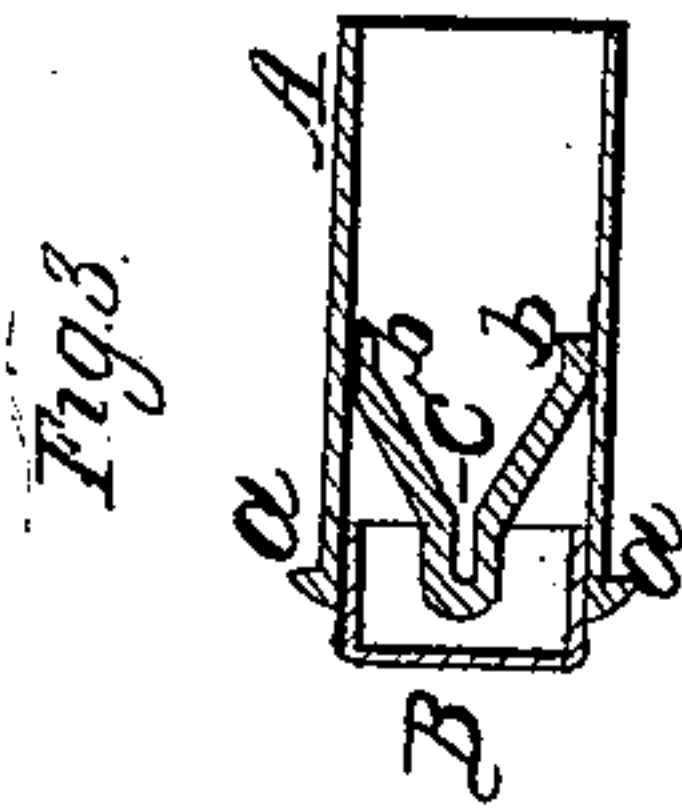


G. W. MORSE.

Cartridge.

No. 20,214.

Patented May 11, 1858.



# UNITED STATES PATENT OFFICE.

GEORGE W. MORSE, OF BATON ROUGE, LOUISIANA.

## IMPROVED CARTRIDGE-CASE.

*Specification forming part of Letters Patent No. 20,214, dated May 11, 1858.*

*To all whom it may concern:*

Be it known that I, GEORGE W. MORSE, of Baton Rouge, in the State of Louisiana, have invented an Improvement in Cartridges or Cartridge-Cases for Breech-Loading Fire-Arms; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1 is an external or side view of a metallic cartridge-case constructed on my improved plan. Fig. 2 is a rear end view of the same. Figure 3 is a longitudinal section of it.

In these drawings, A denotes the tubular case or body of the cartridge, such case being formed open at both ends and with an annular shoulder, *a a*, extending around its rear end, as shown in the drawing. B is an expansible head, which is made of thin metal, and somewhat in the shape of a cup, and so as to slide and fit into the rear end of the tubular case A. Within the said case A there is arranged a furcated tige, C, which consists of a wire bent, as shown in Fig. 3, and having the two extremities of its prongs *b b* soldered or otherwise properly fastened to the internal surface of the case A. The middle part or nipple of the tige may be formed so as to receive a percussion-cap, as the nipple of a gun-lock usually receives the same.

Preparatory to loading the cartridge a percussion-cap is to be placed on the tige, or, instead thereof, the inner surface of the expansible head may be coated with percussion-powder or paste. This having been done, the expansible head B is to be inserted within the case, and the latter filled with a charge of powder and shot or ball, as circumstances may require. After this has been accomplished the cartridge is to be inserted within the open breech of a gun-barrel in such a manner that the shoulder on the case or body of the cartridge may rest against the rear end of the barrel. If we suppose the gun to be furnished with a hammer arranged so as to strike on the expansible head or against it when the trigger of the gun-lock is pulled backward, a part of such head will be driven against the tige, and so as to cause the percussion-powder to be exploded and fire the load of the cartridge, the lateral expansion of the head B, within the body A, being sufficient to prevent

the smoke and flame of the discharge from escaping back between them, and also to expand the rear part of the body A, so as to perfectly fit the bore of the gun.

By constructing the tige and applying it to the body in the manner as described, its prongs serve as braces, or operate somewhat like an arch to hold the tige in position, and still allow of the lateral expansion of the case A, while they maintain it within the case to much better advantage than it would be by a straight bar extending across the case and having a tige projecting from its middle part.

I do not claim a cartridge made so that the whole body of the same may expand under the force of an explosion, as such is the ordinary mode of making a cartridge for the well-known saloon rifle or pistol.

Nor do I claim a cartridge-case having an expansible head or closer separate from the body, and constructed and applied to the body, so as to expand laterally during the explosion of the cartridge and make a close joint around the sides of the said head or closer.

Nor do I claim a furcated tige, applied within a case or body of a projectile, as shown in Riera's British patent of May 6, 1853.

Nor do I claim the application of a tige and a movable head to a cartridge, as exhibited in the French patent of Chaudun, described in Brevet d'Invention, new series, Vol. 13, and represented in Plate 2 (Figs. 24 and 29) of said volume.

My invention differs from all these, inasmuch as its expansible head or closer is not made to encompass or encircle the outer shell of a cartridge-case, but is arranged within the same, and so that it may slide freely toward and away from the tige without any obstruction from the rear end of the cartridge, whereas as expansible heads have heretofore been applied, they have been arranged so as to abut against the rear end of the cartridge-case and encompass the said rear end, serving to arrest their forward movement.

Furthermore, my improved cartridge-case is formed with a shoulder, *a a*, to abut against the end of the gun and to hold the body of the cartridge within and prevent it from being discharged from the gun when an explosion of its charge takes place.

My arrangement of the cartridge-closer B,

with the case A, provided with a tige, C, and the annular shoulder *a a*, affords to the part B such a freedom of motion under a blow as to insure the explosion of the percussion priming or cap. Therefore,

What I claim as my invention is—

My improved cartridge-case as constructed with a tige, *c*, an annular shoulder, *a*, and an expansive cartridge-closer, B, arranged within the body A of the cartridge, and made to slide

longitudinally therein and to operate in other respects substantially as above specified.

In testimony whereof I have hereunto set my signature this 14th day of July, A. D. 1857.

GEO. W. MORSE.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.