

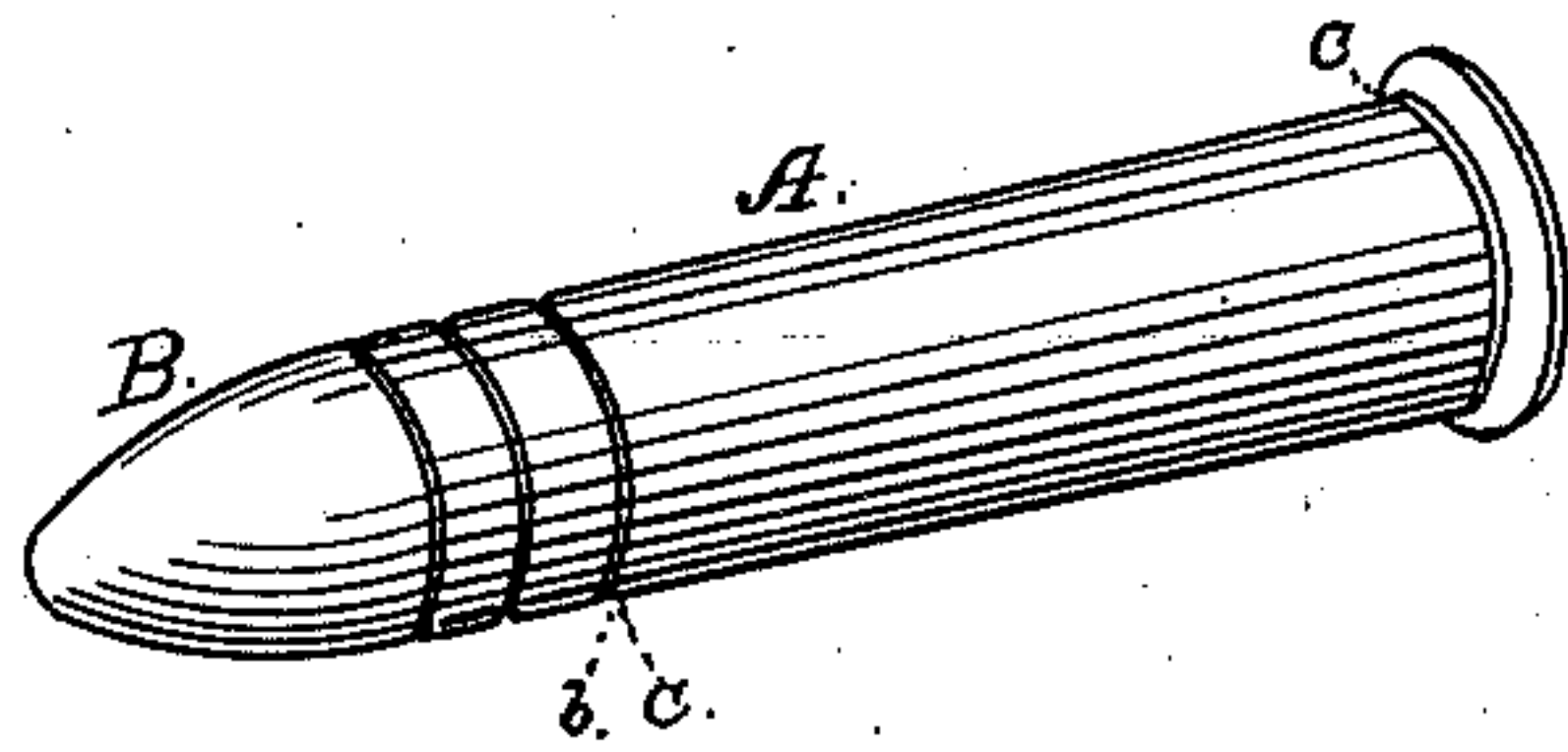
(No Model.)

H. MCGEE.  
CARTRIDGE.

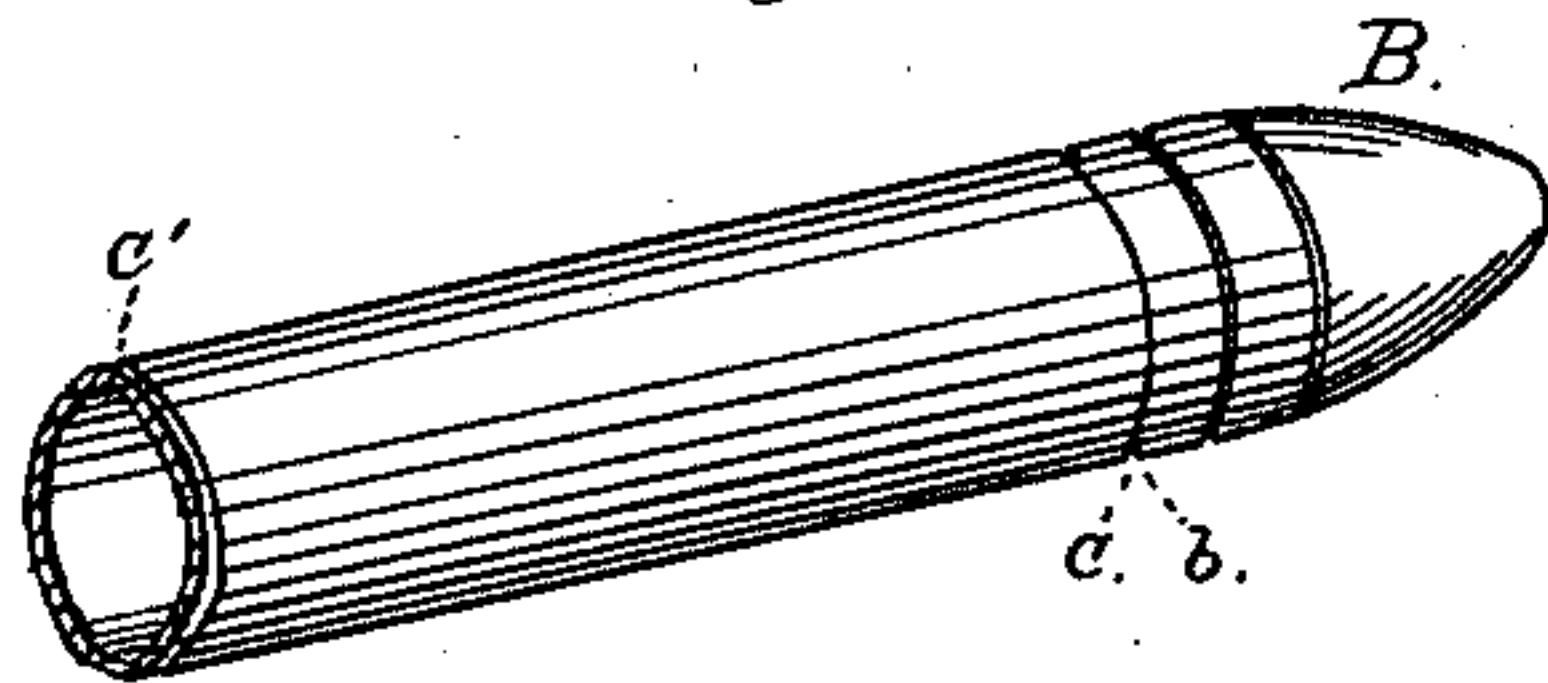
No. 255,878.

Patented Apr. 4, 1882.

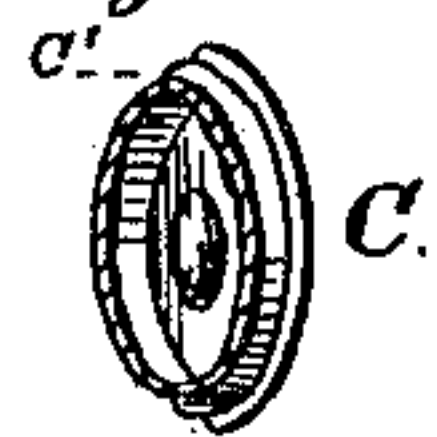
*Fig. 1.*



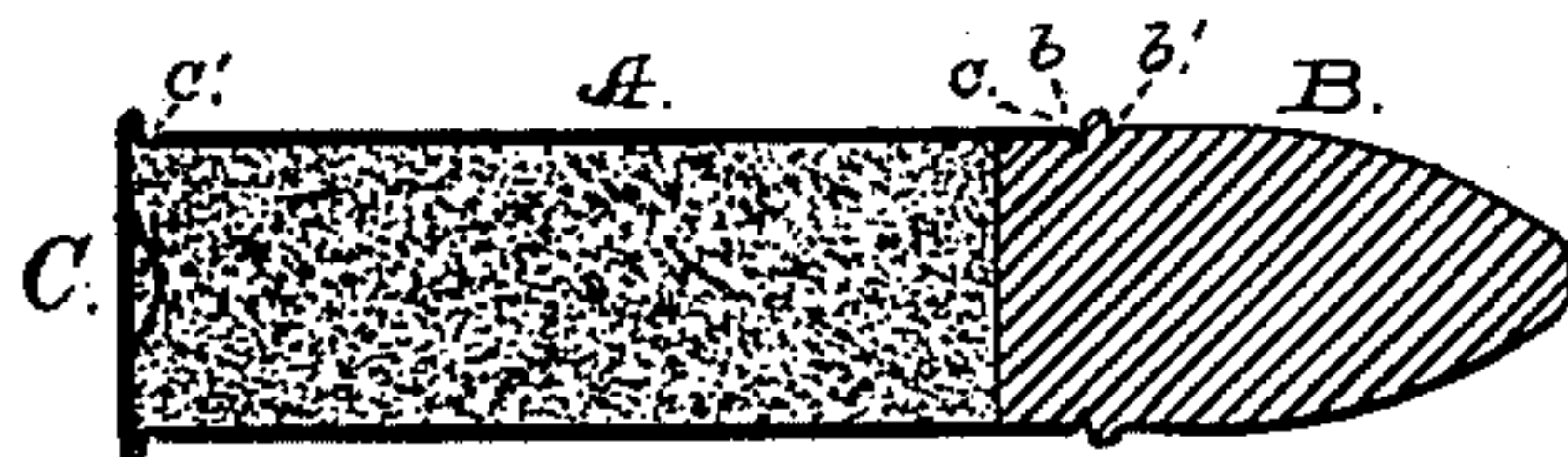
*Fig. 2.*



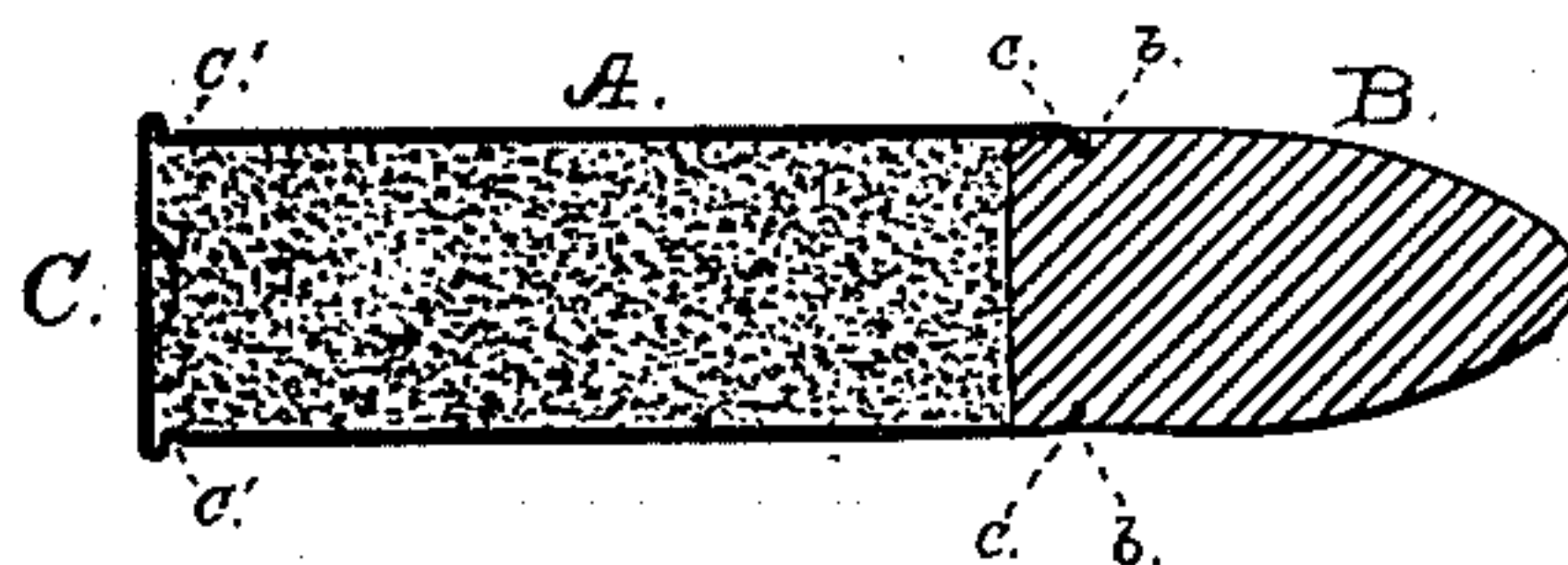
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Attest:  
J. C. Clark.  
S. Williamson

Inventor;  
Henry McGee  
by *[Signature]*  
Attorney.

# UNITED STATES PATENT OFFICE.

HENRY MCGEE, OF NORWICH, CONNECTICUT, ASSIGNOR OF ONE-HALF TO  
THOMAS E. RYAN, OF SAME PLACE.

## CARTRIDGE.

SPECIFICATION forming part of Letters Patent No. 255,878, dated April 4, 1882.

Application filed September 16, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY MCGEE, a citizen of the United States, residing at Norwich, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Cartridges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

The principal objects of this invention are to provide a metallic ball and shot cartridge for small arms, whereby the automatic discharge of the shell shall be facilitated and the more correct direction of the ball secured without rifling the bore of the arm, as hereinafter more fully set forth.

The invention consists in weakening the metallic shell near its cap or head and fastening the shell more firmly to the ball than heretofore, so that when the cartridge is exploded the main body of the shell will be severed from its head and carried away with the ball, the head or cap of the cartridge alone remaining in the cartridge-chamber, and the same dropping away as soon as released in the process of reloading.

Referring to the drawings, in which similar letters refer to similar parts, Figure 1 is a perspective view of the cartridge, showing weakened portion near the head. Fig. 2 is a perspective view, showing the shell partially cut through and the head disconnected by explosion. Fig. 3 is a like view, showing the head detached in the same way. Fig. 4 is a sectional view, showing the ball as molded with circular depression to receive the inbent end of the shell, and also showing the slightly enlarged circular rib to be depressed upon the shell to more firmly secure the same to the ball, and showing the weakened portion of the shell. Fig. 5 is a like view, showing the circular rib of the ball turned down upon the shell in the process of manufacture.

A is the shell; B, the ball; C, the cap or head of the cartridge. The ball has a circular depression, *b*, into which the end *c* of the shell is turned in a curved form, and over the latter the raised portion or rib, *b'*, of the ball

is turned, as shown in Fig. 5, thus making a firm connection between the ball and the shell. 55

Instead of the above, a circular incision may be made into the ball on the angle in which the edge of the shell is turned in, or other suitable means may be employed for securing the shell to the ball without departing from the spirit of my invention, so long a firm hold is secured between the two. 60

The shell A has a circular groove (preferably in a V shape) cut about half through its thickness at *c'*, or if the shell is molded it may be cast thinner at that point and accomplish the same purpose. It will be seen that when the cartridge is exploded the main part of the shell A will break from its cap or head C at *c'*, that being a weaker point than the connection between the ball and the shell. Thus the shell A will be carried away with the ball and form a tail or guide to the same, for a similar purpose as when feathers are put upon the lighter end of an arrow. It is found that by this means a more correct direction of the ball may be secured without rifling the bore of the arm. When the cartridge is thus exploded in firing only the cap or head of the cartridge is left in the cartridge-chamber and the same readily falls out in the process of reloading, thus saving the time and trouble of withdrawing the shell, as heretofore required in the use of cartridges. 70 75 80

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is— 85

1. In a cartridge, the metallic shell A, in one piece, having the weakened portion *c'* immediately joining its head and being firmly secured to the ball at its other end, substantially as and for the purpose set forth. 90

2. The metallic shell in one piece, having the weakened portion *c*, formed by cutting or molding a circular incision or groove around it, in combination with the ball, having a portion of itself turned upon the inbent edge of the shell, substantially as and for the purpose set forth. 95

In testimony whereof I affix my signature in presence of two witnesses. 100

HENRY MCGEE.

Witnesses:

J. M. THAYER,  
CHAS. F. THAYER.