

No. 895,558.

PATENTED AUG. 11, 1908.

R. W. HARRIS.
CARTRIDGE SHELL.
APPLICATION FILED JULY 2, 1907.

Fig. 1.

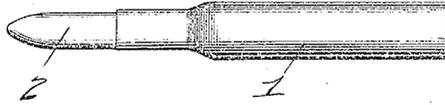
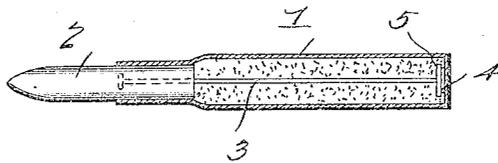


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

RALPH WAYNE HARRIS, OF MONTOUR FALLS, NEW YORK, ASSIGNOR OF ONE-HALF TO STEWART S. GATES, OF ELMIRA, NEW YORK.

CARTRIDGE-SHELL.

No. 895,558.

Specification of Letters Patent.

Patented Aug. 11, 1908.

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To all whom it may concern:

Be it known that I, RALPH WAYNE HARRIS, a citizen of the United States, residing at Montour Falls, in the county of Schuyler and State of New York, have invented new and useful Improvements in Cartridge-Shells, of which the following is a specification.

This invention relates to cartridge shells and while herein illustrated as of that character employed in connection with magazine or other rifles, it is to be understood as having a range of utility as to adapt it for use in connection with shot guns or other small arms.

The object of the invention is to provide a cartridge shell which shall be wholly consumed by the discharge of the cartridge, whereby the necessity of removing a spent shell from the magazine or breech of a rifle or gun will be positively obviated, thereby saving time that would otherwise be lost and which in case of emergency would be valuable. Furthermore, to render the shell absolutely moisture proof and of sufficient stability to withstand usage to which it will be subjected in being placed in a magazine or breech of a gun or the like.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists, generally stated, in a cartridge shell composed of a wholly combustible material.

The invention consists further of a cartridge shell composed of a material that will be consumed when the cartridge is fired.

The invention consists further in a cartridge shell composed of a water proof material that will be consumed when the shell is fired.

The invention consists further in a cartridge shell composed of a gelatinous material.

The invention consists further in the various novel details of construction of a cartridge shell and cartridge, as will be herein-after fully described and claimed.

In the accompanying drawings forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in side elevation of one form of cartridge and shell embodied in the present invention. Fig. 2 is a longitudinal vertical sectional view through the cartridge and shell shown in Fig. 1.

The shell 1 of the cartridge which is herein shown as of the bottle-neck type, is composed of a material that shall be water and dust proof, that shall effectively protect the powder contained therein from destruction or deterioration in the same manner as an ordinary metallic shell and shall be capable of being wholly consumed when the cartridge is fired.

The material employed may be gelatinous in character, say of celluloid, and will possess sufficient stability to permit of its being handled when inserted in the magazine of a rifle or the breech thereof without liability of destruction or of being injured.

The cartridge 2, which may be of any preferred type, has embedded in it one end of a rod 3, the other end of which extends to the rim of the shell and carries the cap 4, that portion of the rod engaged by the cap being provided with a head 5 to present an efficient and thoroughly effective abutment that will insure the explosion of the cap when struck by the plunger or fire pin. The assemblage between the cartridge and the cap or carrying rod may be of any preferred character—that is to say, it may be either rigid therewith or be so assembled so that when the bullet or cartridge leaves the rifle, the rod will drop therefrom.

The shell herein described will be found to possess advantages over the ordinary metallic shell in that it is lighter, so that a greater number of rounds may be carried by the soldier, and further as it is wholly consumed when the shell is fired, the necessity of removing the shell is obviated and the employment of a cartridge extractor which is always liable to become deranged is obviated.

What I claim is:

A cartridge comprising a shell and base integral in structure and composed of a highly combustible gelatinous material, a projectile carried by the shell, and a firing cap carried by the projectile and held in proximity to the base of the shell.

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

RALPH WAYNE HARRIS.

Witnesses:

MARK H. SKINNER,
LEWIS JOHNSON.