## R. R. MOFFATT. SHOT CARTRIDGE.

No. 110,383.

Patented Dec. 20, 1870.

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Witnesses. Jae It Okenen Jos. J. Bender Enventor. RKMoffatt

## United States Patent

## RICHARD R. MOFFATT, OF BROOKLYN, NEW YORK.

Letters Patent No. 110,383, dated December 20, 1870.

## IMPROVEMENT IN SHOT-CARTRIDGES.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, RICHARD R. MOFFATT, of the city of Brooklyn, county of Kings and State of New York, have invented a new and useful Improvement in Shot-Cases for Cartridges, &c., of which the following is a specification, reference being had to the

accompanying drawing.

The object of my invention is to provide a shotcase or envelope which has the advantage of protecting the bore of the gun from leading, usual to shotcases, and to avoid the defects in practice found to exist in closed cases or envelopes now in use, which are that frequently the shot is held within said case during its flight, and thereby fail to attain the object desired.

It consists in a novel method of constructing the case or shell that envelops the shot by treating it with a compound which will make it wholly or partly consumable when fired from the gun, thus freeing the shot and enabling them to spread or scatter.

·In the accompanying drawing-

Figure 1 represents a central section of a shot-case embodying my invention.

Figure 2 represents an elevation view of the shotcase and cartridge attached.

Similar letters of reference in the figures indicate like parts.

In the drawing—

Letter A is the case or shell, which is made of paper, paper-pulp, or any other fibrous material. This is shaped into any desirable form and intended to envelop the charge of shot.

B is a wad which closes the open end or base of the shell A after the shot has been placed therein. This shell or case A, and also the wad B, if desired, may be made wholly or partly consumable, but I prefer to make only the forward end of the case A consumable. This is done by treating the paper or other fibrous material which composes the case or shell with a solution of niter and water, or by means of nitric and sulphuric acid, or by oxidized carbolic acid, or by any other known method which may produce the desired effect, and it may be applied before or after the shell or case A is formed.

The case or shell A, when complete, is inserted or partly inserted in the end of a metallic or paper shell of a cartridge, as shown in fig. 2, or, if desired, it may be used with loose powder in muzzle-loading guns.

In the formation of my shell or case it may be made of pulp, which is prepared with the combustible compound before it is formed into shape to receive the shot.

Having thus described my invention,

I desire to secure by Letters Patent-

A shot-case or shell made partly or wholly consumable, substantially as and for the purpose herein set forth.

R. R. MOFFATT.

THOMAS COSTIGAN. THOMAS P. SHAW.