

T. J. POWER.

Cartridge.

No 50,536

Patented Oct. 17, 1865

Fig: 1.

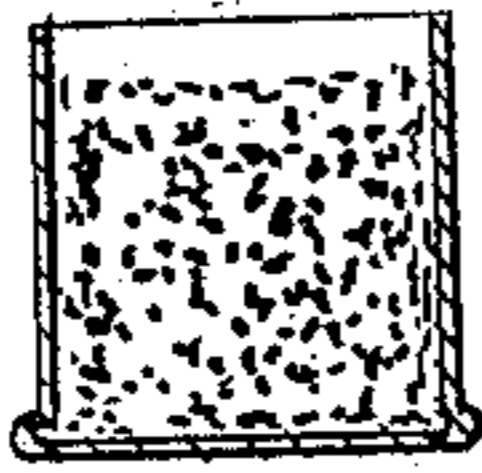


Fig: 2.



Fig: 4.

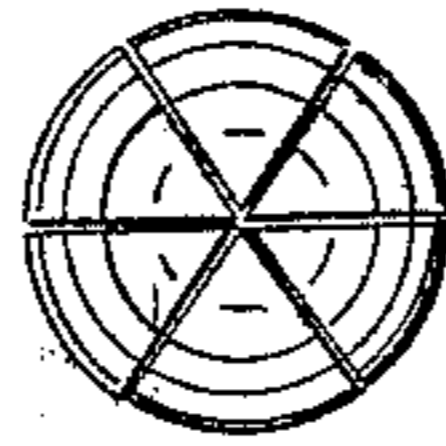


Fig: 3.

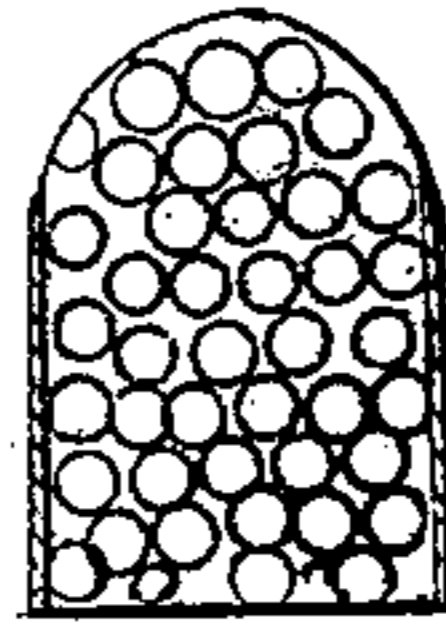


Fig: 5.

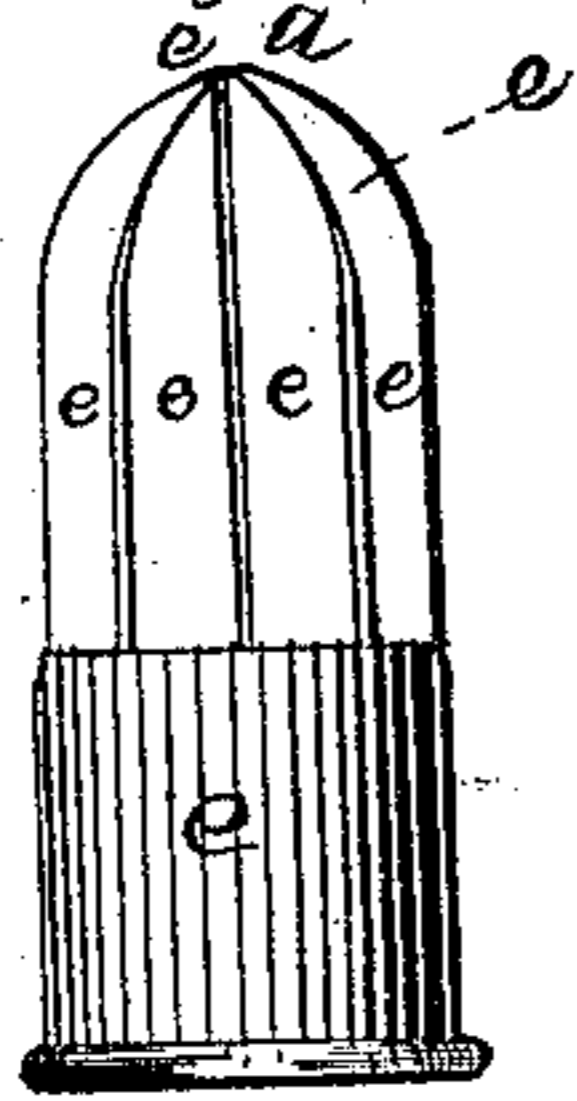
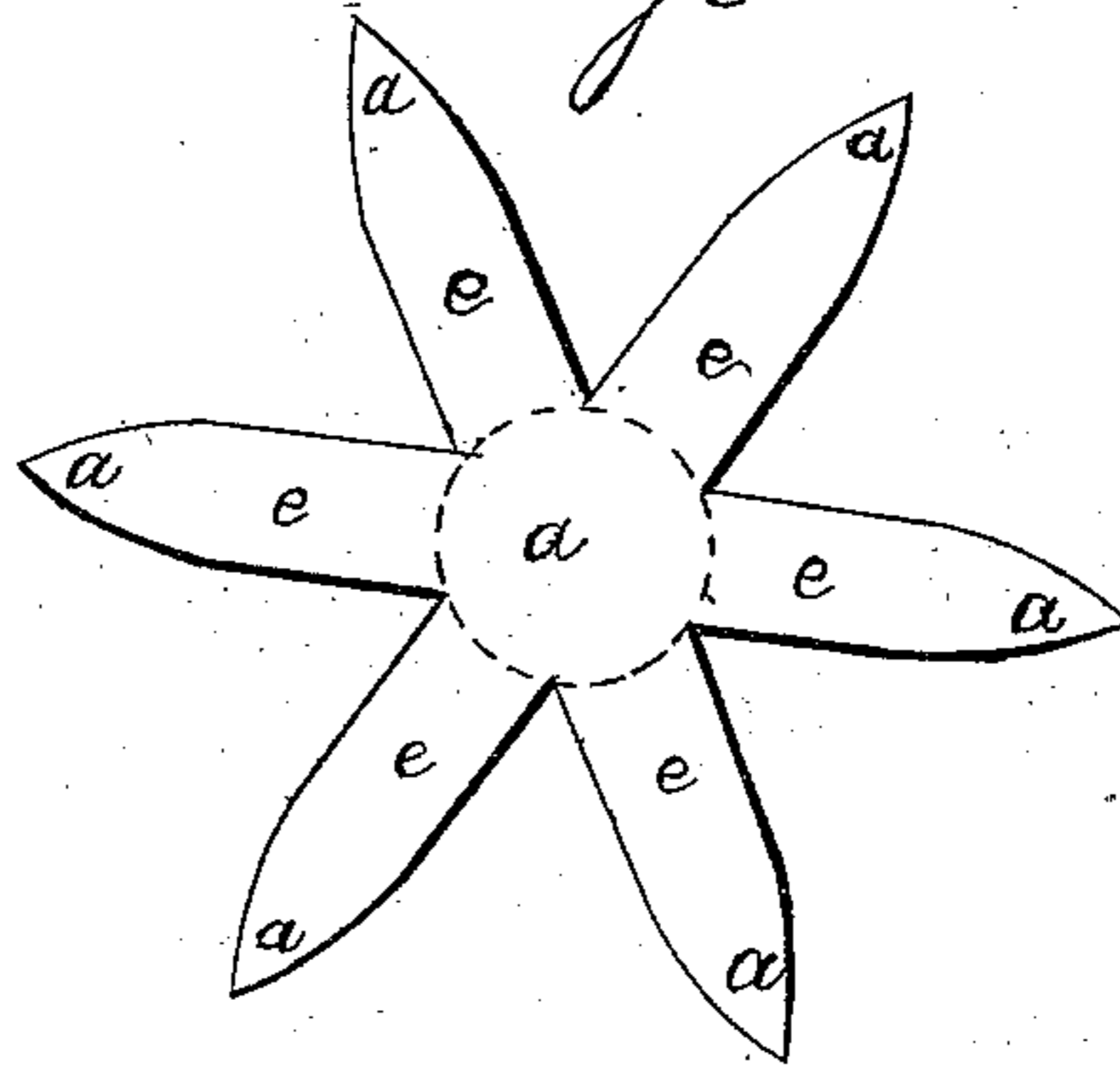


Fig: 6.



Witnesses:

Edw^d C Chamberlin

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UNITED STATES PATENT OFFICE.

TIMOTHY J. POWERS, OF NEW YORK, N. Y., ASSIGNOR TO JOSIAH P. FITCH,
E. C. CHAMBERLIN, AND J. R. VAN VECHTEN, OF SAME PLACE.

IMPROVEMENT IN METALLIC CARTRIDGES.

Specification forming part of Letters Patent No. 50,536, dated October 17, 1865.

To all whom it may concern :

Be it known that I, TIMOTHY J. POWERS, of the city of New York, county and State of New York, have invented certain new and useful Improvements in Metallic Shot-Cartridges for Breech-Loading Guns, constituting the same a new article of manufacture; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and the letters of reference marked thereon.

The same letters in the several figures refer to similar parts.

The nature of my invention consists in so constructing a shot-cartridge for breech-loading fire-arms that the powder and detonate are contained in one case or shell, which may be of the ordinary form. The shot are inclosed in a separate case, which is attached to the powder-case, the whole being so made that the shot-case shall be detached from the powder-case and pass out of the gun with the shot in the act of firing; or, if it remains in the gun and attached to the powder-case after firing, then it shall be left in such a condition as to constitute but little, if any, obstacle to the removing of the shell from the gun.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 is a central longitudinal sectional view of the powder-case. It is an ordinary metallic cartridge-shell, charged with powder and detonate, and made only a little longer than required to hold the powder used as the charge, Fig. 2 being a cross-section of the same case. Fig. 3 is a similar view of the shot-case filled with shot. This I would recommend should be made of thin sheet brass, copper, or zinc, (the latter being preferable, on account of its comparative cheapness,) by first cutting from the sheet a piece in the form represented by Fig. 6, the center *a*, as shown by the dotted line, corresponding in size with the inside of the shell, Fig. 1. The radial strips *c* are then turned at right angles with the center *a* over a round punch or mandrel, so that the edges are brought together. Then, by passing the whole through a proper die, a round tube or case is formed with a closed base, and the opposite end presenting the pointed ends *d* of the strips *c*. The charge of shot then being introduced into this case,

the ends *d* are brought together in the conical form represented by Fig. 5, and fastened together by a drop of solder, by twisting the ends together, by pasting stout paper over them, or in any other manner that may occur to the maker. The base of this case is then inserted in the open end of the shell, Fig. 1, and may be fastened in by crimping or bending inward the edge of the same upon the shot-case. The base of the shot-case constitutes a wad or partition between the powder and shot, and serves to confine the powder securely in the shell, Fig. 1.

I have thus described what I regard as the best method of constructing my new shot-cartridge; but I do not intend to limit myself to the materials named or the precise mode of construction described. The shot-case may be made of paper, if desired, or it may be made entire instead of in strips, as described, whether of paper or other material. The base end may be left open and a separate wad placed between the powder and shot, before the two cases are connected together. The shot-case may also be made by cutting out the material so that the strips *c* shall radiate from the center with their bases outward and the points *a* attached at the center. The tube which they will then form will be closed at the conical end and open at the base. When made in this manner, a wad may be placed between the shot and powder, and the shot-case inserted with its open base in the powder-case, and fastened in as before described.

When this cartridge is fired in a gun the shot-case passes out of the gun with the shot, leaving only the powder-case to be removed after the discharge, and this being only of sufficient length to hold the powder, will be more easily removed than even the case of the ordinary ball-cartridge.

What I claim as new, and desire to secure by Letters Patent, is—

A shot-cartridge formed of the powder-case, Fig. 1, and the shot-case, Fig. 3, the same being constructed, charged, and combined substantially as described.

TIMOTHY J. POWERS.

Witnesses :

EDWD. C. CHAMBERLIN,
J. A. HUBBELL,
JOHN A. WHITEHEAD.