No. 645,546. Patented Mar. 20, 1900.

H. J. BLANCH.

SHOT CARTRIDGE.

(Application filed Nov. 6, 1899.)

(No Model.)

Fig. 2.

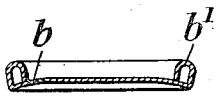


Fig. 1.

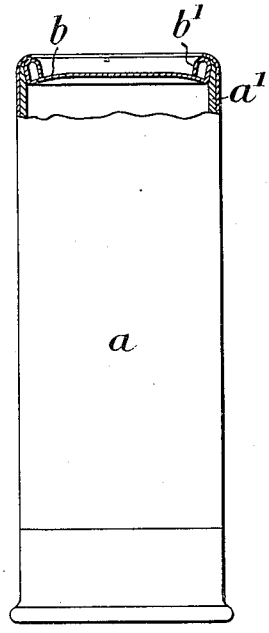


Fig. 3.

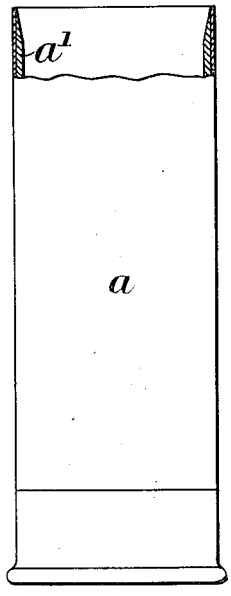
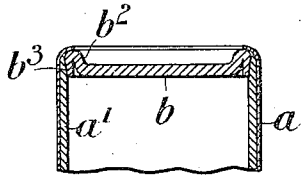


Fig. 4.



Witnesses.
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HERBERT JOHN BLANCH, OF LONDON, ENGLAND.

SHOT-CARTRIDGE.

SPECIFICATION forming part of Letters Patent No. 645,546, dated March 20, 1900.

Application filed November 6, 1899. Serial No. 736,018. (No model.)

To all whom it may concern:

Be it known that I, HERBERT JOHN BLANCH, a subject of the Queen of Great Britain, residing at 29 Gracechurch street, in the city of London, England, have invented new and useful Improvements in Shot-Cartridges, of which the following is a specification.

This invention relates to improvements in waterproof cartridges such as are used in shotguns.

According to the invention I construct the improved cartridge of a metal case of proper length for receiving the charge and a wad or stopper. The wad or stopper which I use comprises a metal disk having a beaded edge, the said disk being adapted to be inserted in the mouth of the metal case with the bead outermost, so that the end of the case can be turned over on the edge of the bead, thereby making a close-fitting joint.

The edge of the stopper may project above the edge of the case, so that when both are turned in the rounded edge may be formed partly by the edge of the stopper and partly by the inturned edge of the cartridge-case.

I sometimes make the wad or stopper of paper-pulp or other similar suitable material. In this case the said wad is advantageously made of a disk of the material formed with a doubly-bent projecting edge upon which the edge of the cartridge-case is turned in.

To enable the invention to be fully understood, I will describe the same by reference to the accompanying drawings, in which—

Figure 1 is a sectional elevation, drawn to an exaggerated scale, of a cartridge-case and metal wad constructed according to the invention. Fig. 2 is a vertical section of my metal wad or stopper. Fig. 3 is a view similar to Fig. 1 of the cartridge-case without the wad, and Fig. 4 is a vertical section of the end of a cartridge-case having a wad or stopper of paper-pulp or other similar suitable material.

a is the cartridge-case, which is made of sufficient length, as above described, and a' is a paper lining. This paper lining a' is preferably tapered or chamfered at the end of the case a which receives the wad b to insure that the metal edge alone of the case grips the wad. In the construction shown in Figs. 1, 2, and 3 the wad is formed of a metal disk having its edge bent upward and inward to provide a rounded bead, as shown at b' in Figs. 1 and 2. This wad is inserted into the mouth of the cartridge-case a, (shown in Fig. 3,) and the said end is turned over onto the bead b', as shown in Fig. 1.

Fig. 4 shows a cartridge-case having a wad of paper-pulp or other similar suitable material. The said wad consists of a disk b, having its edge turned up, as shown at b^2, and then down, as shown at b^3, thereby forming the rounded bead upon which the metal edge of the case a is turned in. The double bend b^2 b^3 at the edge of the disk b provides the necessary stiffness where required.

Instead of making the wads or stoppers as hereinbefore described I can employ a stopper consisting of a disk of suitable material having upon its face a ring preferably semicircular in cross-section. This ring may be formed integral with or separately from the disk, in which latter case the disk may be of one material and the ring of another.

Although I have shown a cartridge-case provided with a paper lining, it will be obvious that the invention is also applicable to cartridges having a metal case without such paper lining.

Wads constructed and fitted to cartridges as hereinbefore described are sufficient to keep the cartridge efficiently closed until it is fired and also to offer sufficient resistance to enable the proper combustion of the powder to take place. Furthermore, on firing the wad properly opens the turned-over portion of the case without its being necessary to open the beading of the wad. This method of stoppering also provides a convenient finish to the mouth of the case for handling and enables a full-length metal cartridge-case to be used without the disadvantages hitherto attached to such cases—namely, the sharp and inconvenient finish at the mouth or the exposed portion of paper, which by becoming damp swells and may jam in the cartridge-chamber on loading or ejecting.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In a cartridge, the combination with the case provided interiorly adjacent to its open end with a chamfered portion forming a seat for the wad or stopper, of a closing wad or stopper adapted to engage said seat and provided on its outer face with a rounded annular bead onto which the edge of the case is adapted to be turned in, substantially as described.

2. A closing wad or stopper for a cartridge consisting of a disk having its edge portions bent upward rounded over and bent downward to form an annular rounded bead, substantially as described.

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Witnesses:
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