

J. W. COCHRAN.
Shot Cartridges.

No. 157,793.

Patented Dec. 15, 1874.

Fig. 1.

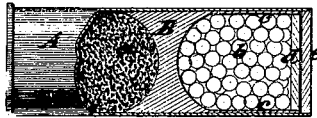


Fig. 2.

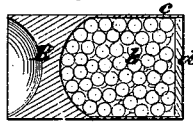
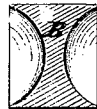


Fig. 3.



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IDA COCHRAN, OF NEW HAMBURG, NEW YORK, EXECUTRIX OF JOHN W. COCHRAN, DECEASED.

IMPROVEMENT IN SHOT-CARTRIDGES.

Specification forming part of Letters Patent No. 157,793, dated December 15, 1874; application filed November 7, 1874.

To all whom it may concern:

Be it known that I, JOHN W. COCHRAN, of the city, county, and State of New York, have invented Improvements in Shot-Cartridges, of which the following is a specification:

The object of this invention is to prevent the scattering of the shot, and the leading of the bore of the gun, and also to facilitate the reloading of the cartridge-case when it is desired to use it over again; and to this end it consists in the combination, with a double expanding wad introduced between the powder and shot, of an attached tube or case, which is independent of the outer case or case proper, for the purpose of containing the charge of shot.

Figure 1, in the accompanying drawing, is a longitudinal view, partly in section, of a complete cartridge illustrating both features of this invention. Fig. 2 is a central longitudinal section of the combined double expanding wad and shot-case. Fig. 3 is a central section of the expanding wad without an attached shot-case.

Similar letters of reference indicate corresponding parts in the several figures.

A is the case of the cartridge, which may be made wholly of metal, or with a metallic head and a tube of paper or other material, and may be primed in any suitable manner. B is the double expanding wad, which is placed between the powder, *a*, and shot, *b*. This wad has its front and rear both concave or cup-shaped. Its external circumference is such that it may, in its normal condition, fit snugly into the interior of the tube of the case A. This wad may be made of paper, by first cutting a long and slightly-taper strip of paper, and rolling up the said strip tightly, commencing at its narrower end, and afterward placing the roll into a die of suitable form, and subjecting it to pressure in an axial direction, whereby the several layers are slurred into each other, and so made to bind them-

selves together, and the whole roll is compacted into a hard and solid mass resembling *papier-maché*.

When the said wad is made with an attached shot-case, *c*, as shown in Figs. 1 and 2, it may be made of a strip in the same manner, a portion of the strip at the wider end being made parallel, or with one edge parallel, with the center of the strip, the said wider portion, on being rolled up, forming the case *c*. The case *c* may, however, be made of paper or other material, and attached to the wad by adhesive material or otherwise.

When the shot-case and double expanding wad are thus constructed or combined, a number of such cases with attached wads may be kept on hand loaded with shot, which may be confined therein by a separate wad, *d*, inserted into the mouth of the case, as shown in Fig. 2. When the cartridge-case A is loaded or reloaded, one of the loaded cases *c*, with its attached wad, may be inserted on the top or in front of the charge of powder, and confined by an additional wad, *e*, inserted into the mouth of the case A, as shown in Fig. 1.

When the double expanding wad is made without an attached shot-case, as shown in Fig. 3, the said wad is inserted into the cartridge-case A after the charge of powder, and the shot are there inserted on the top or in front of the said wad directly into the case A, and confined by a wad inserted into the front of the case.

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

The combination of the double expanding wad with an attached shot-case, substantially as and for the purpose herein specified.

J. W. COCHRAN.

Witnesses:

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