

G. SMITH.
CARTRIDGE.

No. 170,643.

Patented Nov. 30, 1875.

Fig. 1

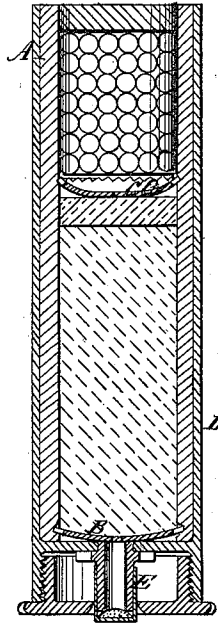
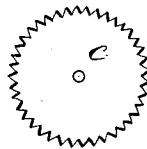


Fig. 2



WITNESSES:

C. Numa
Alex F. Roberts

INVENTOR:

BY *G. Smith*
Mum
ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE SMITH, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN CARTRIDGES.

Specification forming part of Letters Patent No. 170,643, dated November 30, 1875; application filed November 13, 1875.

To all whom it may concern:

Be it known that I, GEORGE SMITH, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Self-Extracting Cartridge, of which the following is a specification:

My invention consists of a strong paper or straw-board tube or shell, in which the charge is confined by a metallic wad at each end, the one at the outermost end being so contrived that it retains the charge without folding in the outer end of the shell, as in the common way, and, by the explosion, its edges are expanded into the shell to such extent that it forces the shell out of the gun, while the one at the inner end is forced out of the shell and left in the gun, to be dropped out after firing.

The shell is to be used for shot-gun cartridges, and to contain both powder and shot, or shot only, and will, by preference, be fired from a strong metallic case of the form of an ordinary metallic cartridge-case when used with breech-loading guns, for which it is mainly designed; but it may be used with muzzle-loading guns.

Figure 1 is a sectional elevation of my improved cartridge and the metallic case used in firing it, and Fig. 2 is a plan of the wad.

Similar letters of reference indicate corresponding parts.

A represents the paper tube; B, the metal-

lic wad at the inner end, and C the one at the outer end. These wads have notched and pointed edges, and they are made slightly larger than the interior of the paper tube, so as to catch in the walls of the same when pressed in the ends, and thereby be kept in position, so as to avoid the necessity of folding in the ends of the tube, to make a bead for retaining the wad, as is now done with paper shells, which involves the expense and labor of keeping a machine for making the cartridges.

By this plan the sportsman can carry the material and make up his cartridges anywhere.

Another important advantage of this plan is, that the shell is forced out of the gun by the explosion, which forces out the wad B, and drives out the shell along with the wad C. D is the metal firing-case, with nipple E, for use with breech-loading guns.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, in a cartridge, of metallic wads B C and the paper shell A, substantially as specified.

GEO. SMITH.

Witnesses:

T. B. MOSHER,
ALEX. F. ROBERTS.