

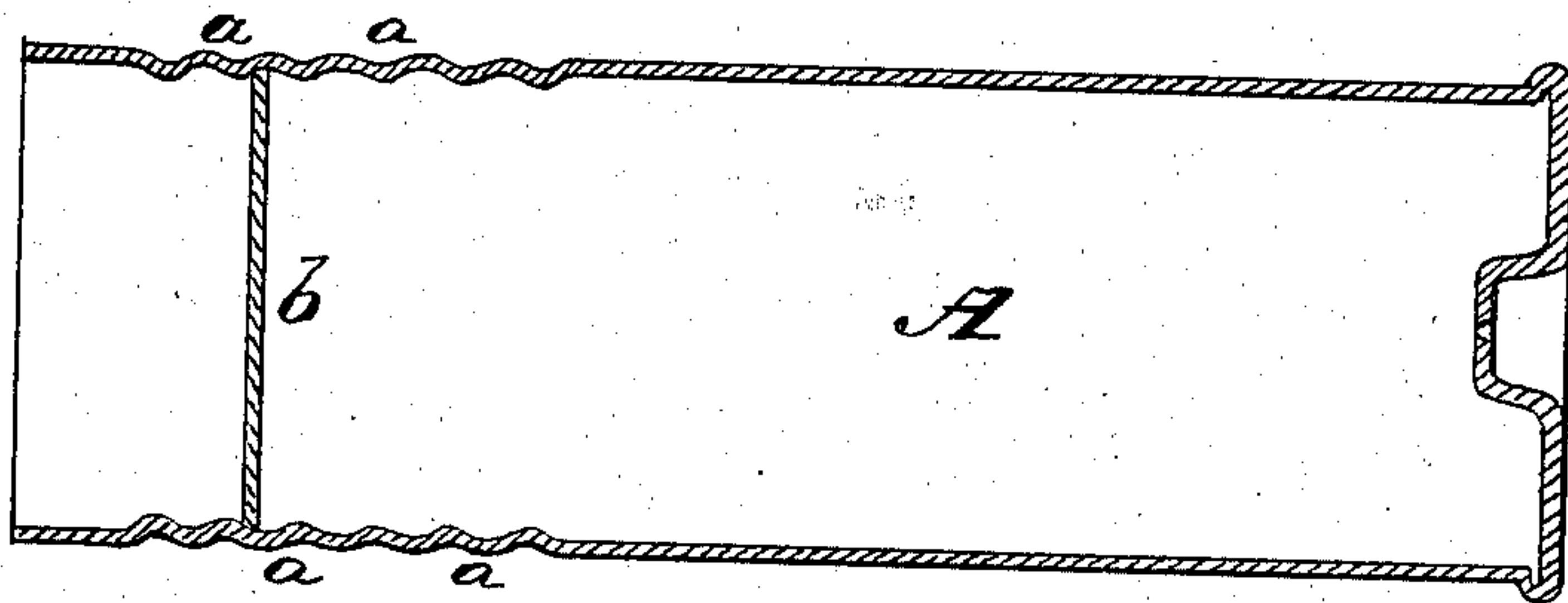
A. D. LAWS.

Improvement in Shot-Cartridges.

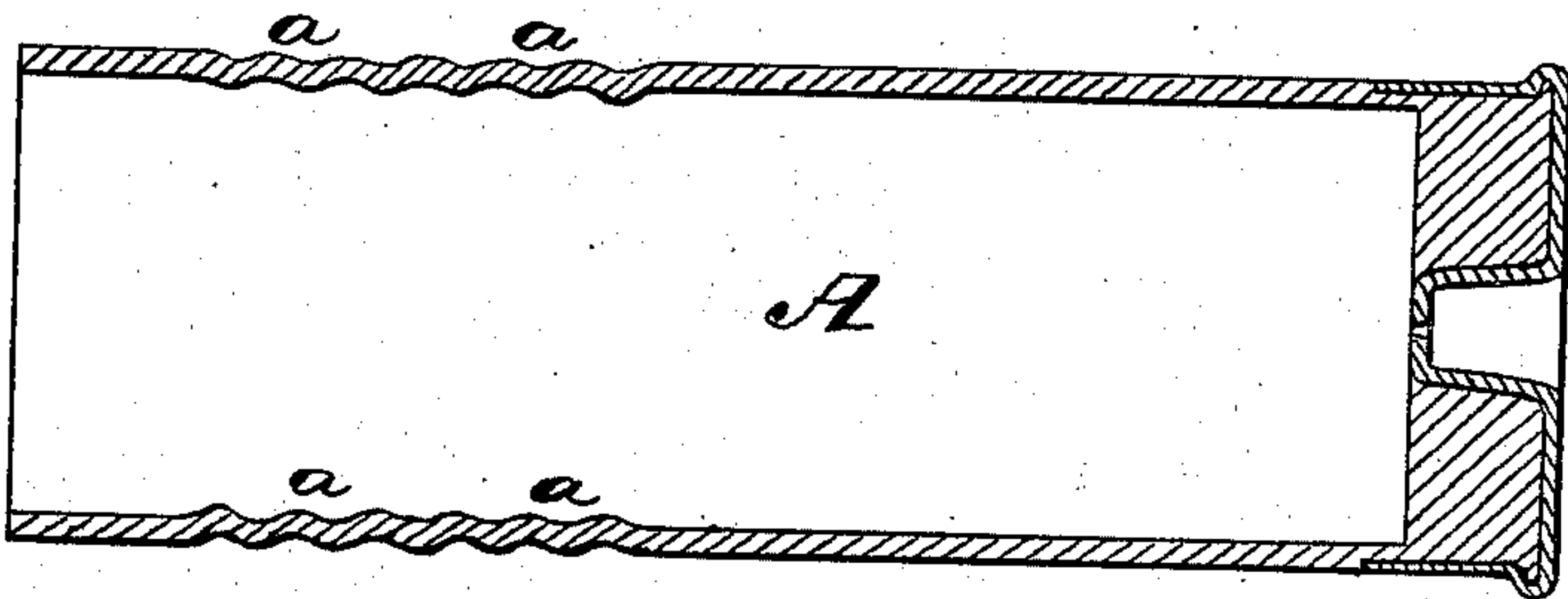
No. 131,104.

Patented Sep. 3, 1872.

*Fig. 1*



*Fig. 2*



*Witnesses:*

*R. J. Campbell,*  
*J. N. Campbell.*

*Inventor*

*A. D. Laws*

*by*  
*Wm. French & Lawrence.*

# UNITED STATES PATENT OFFICE.

ALBERT D. LAWS, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO HIMSELF  
AND WILLET THOMPSON, OF SAME PLACE.

## IMPROVEMENT IN SHOT-CARTRIDGES.

Specification forming part of Letters Patent No. 131,104, dated September 3, 1872.

*To all whom it may concern:*

Be it known that I, ALBERT D. LAWS, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new and Improved Shot-Cartridge; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a diametrical section through my improved metallic-shot shell. Fig. 2 is a diametrical section through my improved paper-shot shell.

Similar letters of reference indicate corresponding parts in both figures.

The object of this invention is to improve shot-cartridges by constructing on their interior surfaces, between their ends, a number of corrugations or shoulders, and in combining with such a cartridge a wad which will be firmly held in its place by any one of said corrugations or shoulders, according to the varying sizes of the charges of shot used, as will be hereinafter explained.

The following description of my invention will enable others skilled in the art to understand it.

In the accompanying drawing, A represents a shot-shell, for a breech-loading gun, which may be made of metal, paper, or of any other suitable substance. At and near the muzzle or open end of this shot-shell a number of corrugations, *a a*, are pressed into it at proper distances apart, according to different charges which it may be desired to use. The corrugations are annular and in planes at right angles to the axis of the shell, and are designed to

afford shoulders for receiving the edge of the wad *b*, which retains the shot in place.

Prior to my invention shot-shells were made smooth on their inner sides, and in continual shooting one barrel of a double-barrel gun (as in bird-shooting) the charge in the other barrel becomes loose from the jar and concussion and frequently drops out of the barrel. Also, in carrying shot-shells in the belt the smooth shells have to be arranged bottom side up, by doing which a great many are lost out of the belt.

These objections to the old shot-shell do not prevail with my improved shells, for the shoulders *a* will firmly hold in place the wads which are last placed in the shells.

I am aware that it is not new with me to construct a corrugated ball-cartridge; neither is it new to secure a wad in the end of a cartridge by turning over the end. I do not, therefore, claim these features broadly. My invention is not only for the purpose of holding the wad of a shot-cartridge firmly in place in the cartridge, but it is also for the purpose of permitting this to be done for charges varying in size.

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

The combination of a corrugated shot-cartridge, A, and an adjustable wad, *b*, whereby the wad can be retained in any desired position, substantially as and for the purpose described.

Witnesses: ALBERT D. LAWS.

GOODWIN STODDARD,

FREDERIC B. HALL.