

(No Model.)

W. C. BUSH.
CARTRIDGE.

No. 505,089.

Patented Sept. 19, 1893.

Fig. 1.

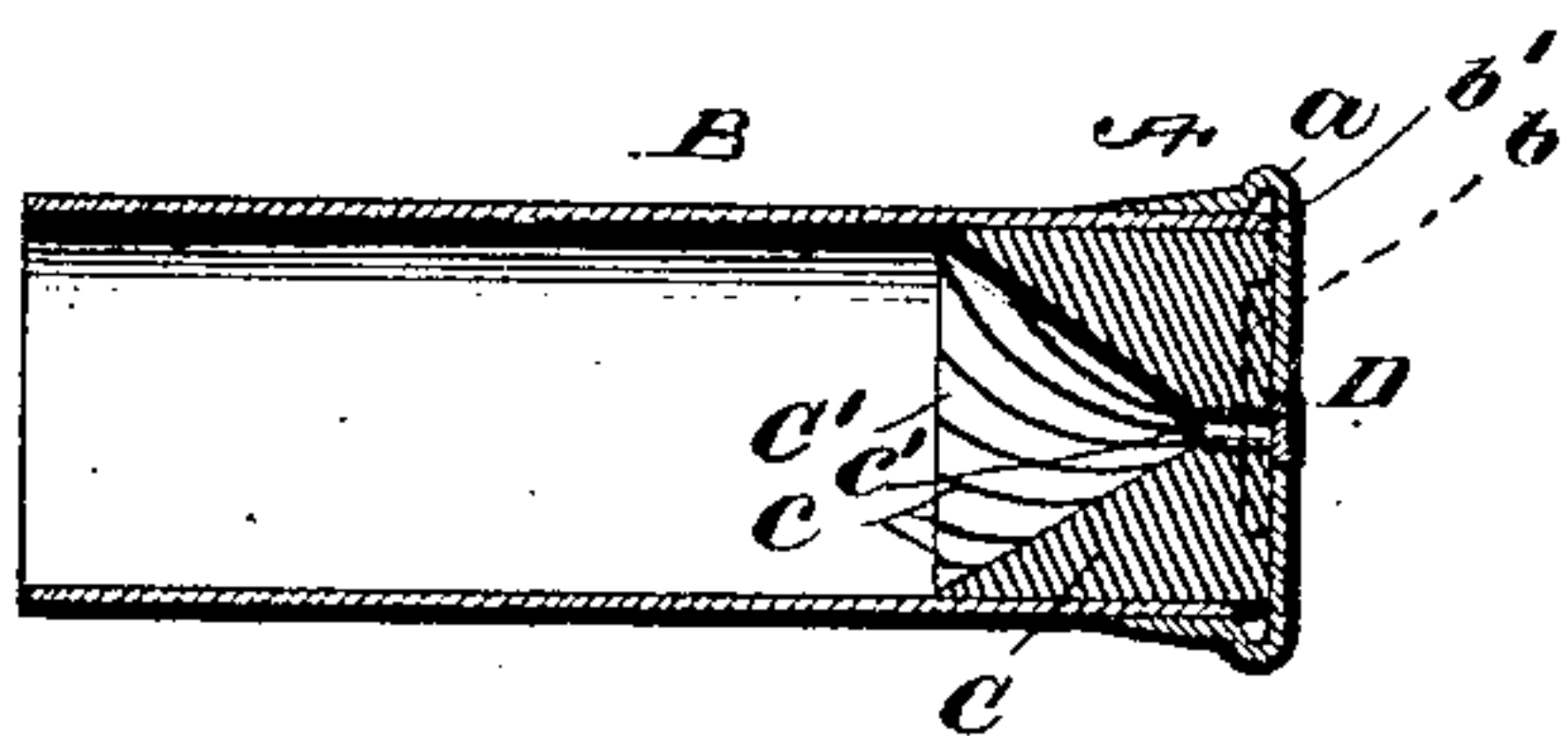


Fig. 2.

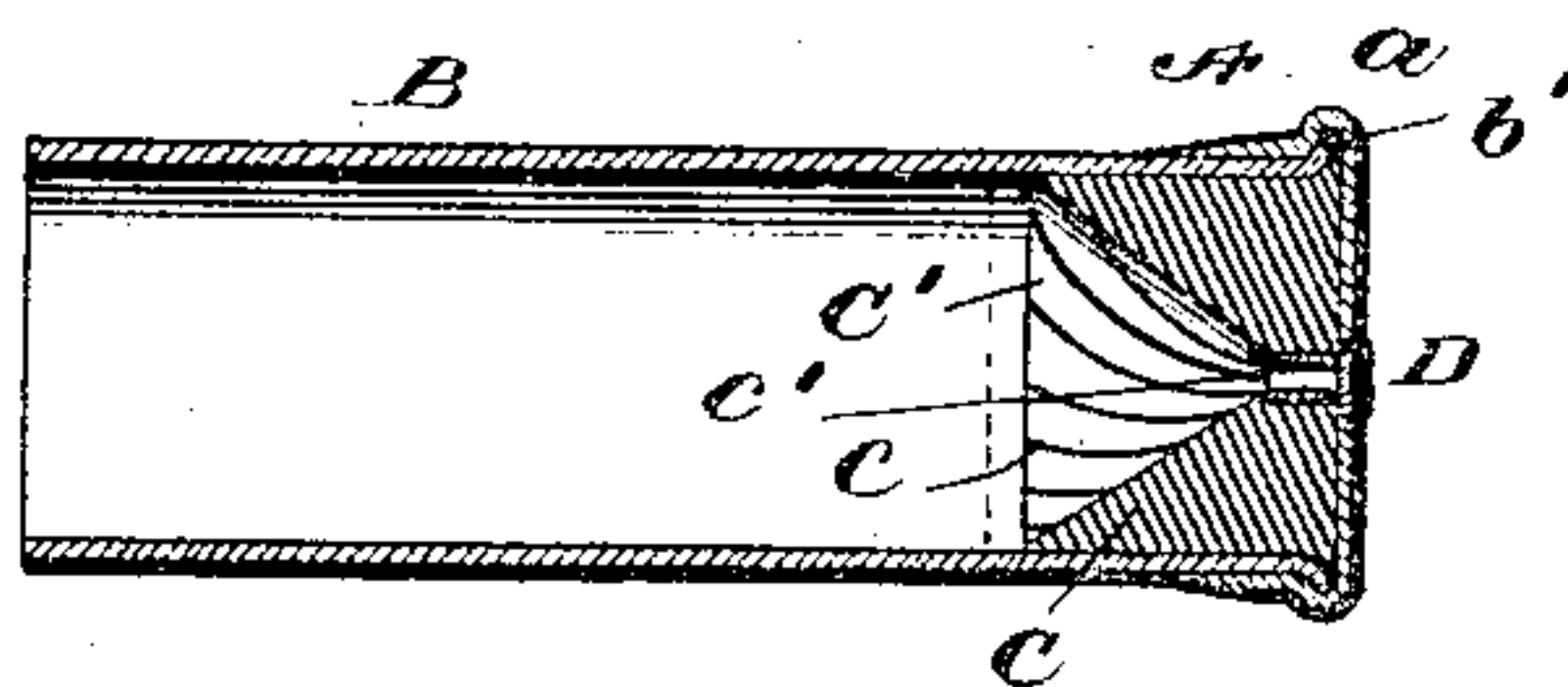


Fig. 3.

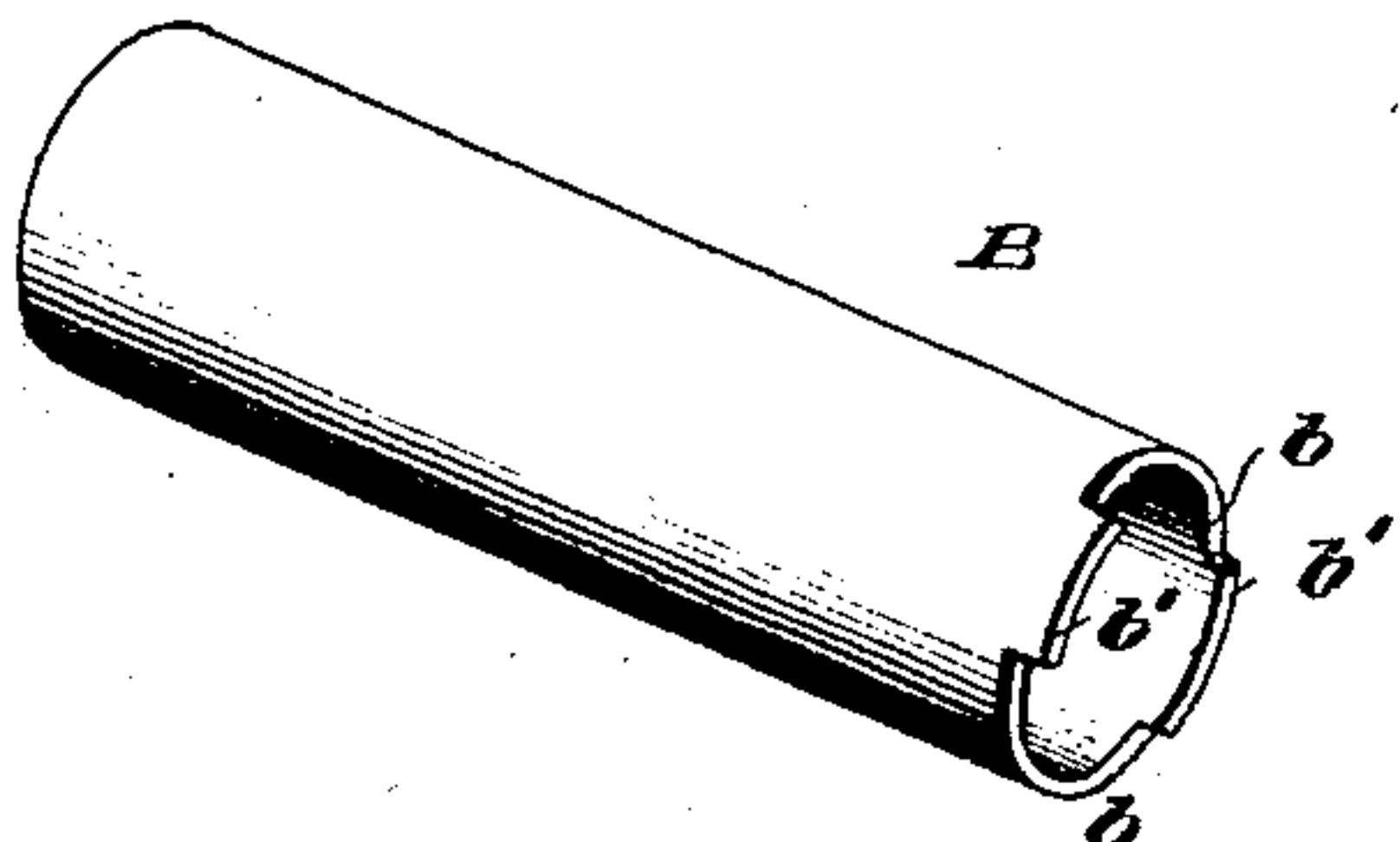
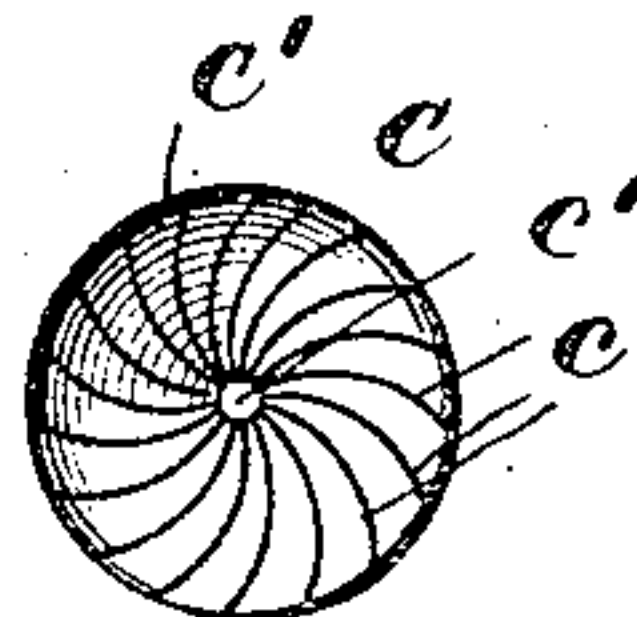


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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CARTRIDGE.

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Application filed March 11, 1893. Serial No. 465,562. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. BUSH, a citizen of the United States, residing at Wilmington, in the county of New Castle and State of Delaware, have invented certain new and useful Improvements in Cartridges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain improvements in that class of cartridge shells formed in two parts and provided with a chambered breech block interlocked with the parts of said shell so as to hold the same together and prevent the cylinder or main section of the shell and breech block from being blown out.

My said invention consists in certain novelty in the construction, arrangement and combination of the various parts of the same all of which I will now proceed to point out and describe, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal section of a shell embodying my invention. Fig. 2 is a longitudinal section of the completed shell. Fig. 3 is a perspective of the cylindrical or main section of the shell; Fig. 4, a front end view of the breech block.

Referring to said drawings, A represents the breech section of the shell which when completed is provided with the hollow annular flange or rim *a*.

B is the cylindrical or main section of the shell having its rear end cut away forming oblong recesses *b* opposite each other and oblong projections *b'* also opposite each other.

C is the breech block which may be made of wood, paper or any suitable material. Said breech block is provided with a convex conical powder chamber *C'* in its front end, said chamber being rifled as indicated by the letter *c*, and provided with the vent *c'*. By rifling the powder chamber of the breech block the powder when ignited creates a circular motion or force behind the wad and shot forcing the same from the barrel in a circular motion, holding the shot together for a greater distance and thus concentrating said shot.

D indicates the primer plug.

In manufacturing my improved shell, the cylinder section is inserted in the breech sec-

tion until the projections *b'* seat against the bottom of said section. The breech block is fitted in the cylinder. The shell is then placed in a suitable die and a proper implement inserted in said shell and forced into the same forming the convex conical powder chamber. Meanwhile the die is manipulated forming the hollow annular flange or rim on the breech section, and at the same time compressing the material forming the breech block and forcing portions of it out through the oblong openings *b* into the hollow annular flange or rim *a*, and forcing the projections on the rear end of the cylinder section into said flange, a certain portion of the material forming the breech block also being forced into the hollow annular flange or rim back of said projections *b'*, thus interlocking the several parts, holding the same securely together and preventing the cylinder and breech block from being blown out when the cartridge is exploded.

The above is the preferred way of making my improved shell, but it may be manufactured in any other desired manner. The shell may be of paper or metal and the oblong recess can be formed in a paper shell as well as in metal. The rifling of the powder chamber of the breech block may be done by the die when the said block is compressed or by any other means.

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

1. A cartridge having a shell consisting of a breech section having a hollow annular flange or rim, a cylindrical or main section having oblong recesses in its rear end, a breech block having a conical powder chamber located in the rear end of said cylinder or main section, and compressed to force the portion of the same through the oblong recesses into the hollow annular rim of the breech section, substantially as shown and described.

2. A cartridge having a shell consisting of a breech section having a hollow annular flange or rim, a cylindrical or main section having oblong recesses and oblong projections at its rear end, a breech block having a conical powder chamber, located in the rear end of the cylinder section and compressed to force the oblong projections of the cylinder into the hollow flange or rim and portions

of the breech block through the oblong openings into said flange or rim, substantially as shown and described.

3. A cartridge having a shell consisting of
5 a breech section having a hollow annular flange or rim, a cylindrical or main section having oblong recesses in its rear end, a breech block having a conical rifled powder chamber located in the rear end of the main
10 or cylinder section, and compressed to force

a portion of the same through the oblong recesses into the hollow flange or rim of the main section, substantially as shown and described.

In testimony whereof I affix my signature in 15
presence of two witnesses.

WILLIAM C. BUSH.

Witnesses:

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