

(No Model.)

F. H. WILLIAMS.

SABOT FOR ORDNANCE.

No. 315,102.

Patented Apr. 7, 1885.

Fig 1

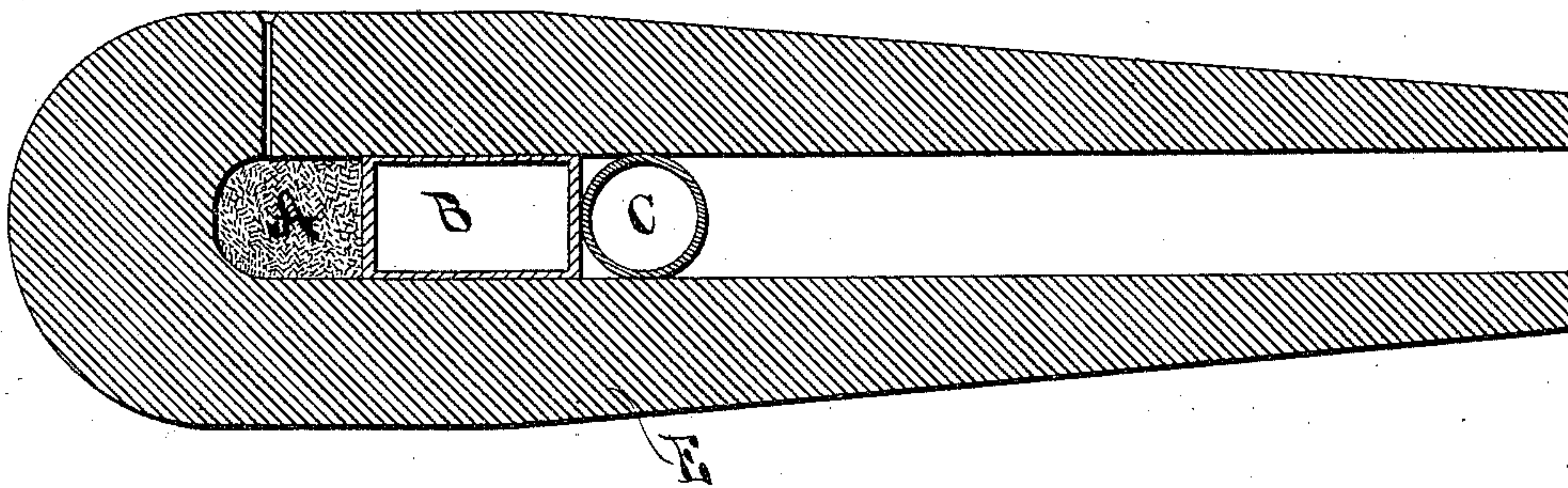


Fig 2

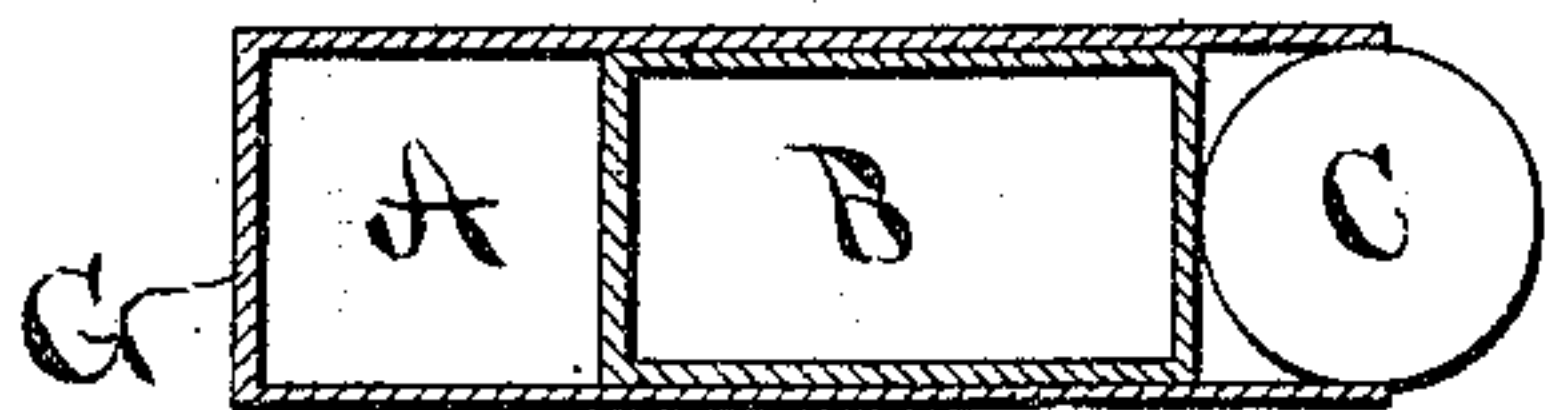
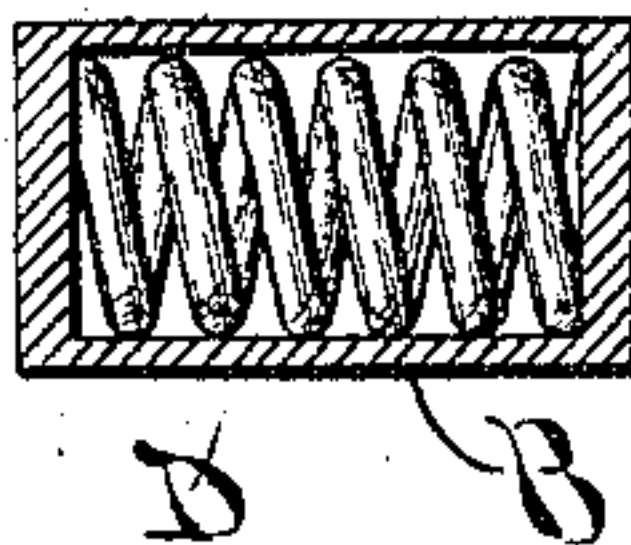


Fig 3



Fig 4



Witnesses.

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SABOT FOR ORDNANCE.

SPECIFICATION forming part of Letters Patent No. 315,102, dated April 7, 1885.

Application filed December 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS H. WILLIAMS, of Syracuse, county of Onondaga, State of New York, a citizen of the United States, have invented certain new and useful improvements in propelling explosive projectiles from any ordinary gun without danger of exploding the projectile by the force of the charge in the gun by which the explosive shell is projected, so that a dynamite or other highly-explosive shell can be shot off with safety from the gun like any ordinary projectile. I attain this result by the devices illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal view of a gun with the devices forming the charge in place; Fig. 2, a separate view of the charge; Fig. 3, a sectional view of a hollow elastic cylinder filled with oakum or other elastic compressible material forming an air-tight sabot or cushion; Fig. 4, section of a similar cylinder having a spiral spring therein.

In the employment of my new device the charge of powder, gun-cotton, or other proper material, A, is like that heretofore used in any ordnance for throwing shot or shell. The explosive shell C may be formed in any known way or shape to contain the explosive material with which it is charged. I make no claim of novelty to either of these elements A C, which may be so varied as to suit the purpose of the gunner. Between these elements A C my invention is placed. It consists of a short cylinder, B, formed of flexible or yielding material, made, preferably, hollow with its ends closed air-tight and filled with oakum or other analogous material, to form a buffer or cushioned sabot between the charge of powder A and the shot or shell C. A spiral spring may be placed within the cylinder B, as seen in

Fig. 4, either with or without other elastic resisting material, or the cylinder may be made homogeneous throughout or otherwise to form the cushion, sabot, or buffer between the charge and the explosive shell, to shield the latter from sudden concussion that would explode it by the discharge of the charge of powder A, thereby preventing the danger of exploding the dynamite or other explosive in the shell while being discharged from the gun.

The mode of forming the cylinder B can be varied as well as its length to suit the purpose for which it is intended, it being made of sufficient length, elasticity, and resistance to suit the charge, heavy or light, and a shell for long or short range, the cushion, sabot, or buffer B being adapted thereto.

I am aware that sabots of fibrous material or wads and springs have been used at the rear of projectile, but without an external air-tight casing; also, that rubber, spring, fibrous, and analogous buffers have been used as a component part of shells. These I do not claim.

Having thus described my invention, I claim—

1. The air-tight cylindrical sabot or buffer B, filled with oakum or other analogous yielding elastic material, substantially as and for the purposes specified.

2. The sabot or buffer formed of an elastic external air-tight case having supporting spiral springs within, and a filling of fibrous or other yielding material, substantially as described.

FRANCIS H. WILLIAMS.

Witnesses:

G. S. LEONARD,
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