(No Model.)

## H. W. LIBBEY.

SECTIONAL CARTRIDGE SHELL.

No. 347,051.

Patented Aug. 10, 1886. FIG.2.

FIG.1.

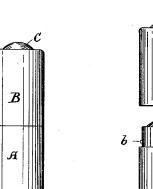


FIG.4.

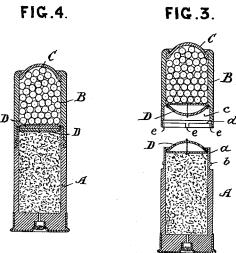
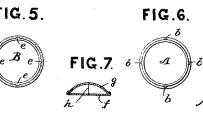


FIG. 5.



Witnesses.

## United States Patent Office.

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## SECTIONAL CARTRIDGE-SHELL.

SPECIFICATION forming part of Letters Patent No. 347,051, dated August 10, 1886.

Application filed July 23, 1885. Serial No. 172,390. (No model.)

To all whom, it may concern:

Be it known that I, Hosea W. Libbey, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Mas-5 sachusetts, have invented a new and useful Improvement in Sectional Cartridge Shells, of which the following is a specification.

The object of my invention is to construct a cartridge shell that can be loaded by hand, 10 without the employment of any kind of machine; and the invention consists in making the shell in two parts, one part for containing powder, and the other part for shot, the two parts being secured together by a suitable

15 locking device.

Referring to the accompanying drawings, Figure 1 is a view of the shell as it appears when the two parts are united together. Fig. 2 is view of the two parts disconnected. Fig. 20 3 is a section of the two parts disconnected, when loaded. Fig. 4 is a section of the shell loaded and ready for use. Fig. 5 is a plan view of the under side of the upper half, and Fig. 6 is a plan view of the upper end of the 25 lower part. Fig. 7 is a section through one of the wads.

In carrying out my invention I make the cartridge shell in two parts, and secure them together by means of a male-and-female joint. 30 The lower part, A, is formed at its base in the usual manner, and its other end is made of smaller external diameter, which forms the male portion a of the joint, and is provided with pins or study b. The upper part of the 35 shell B is provided at its inner end with a recess, c, that constitutes the female portion of the joint, which is also provided with a groove, d, and with apertures e, extending from the groove d to the outer edge, so that when it is 40 desired to connect the two parts A and B the portion a is inserted into the recess c, with the pins or studs b opposite the apertures e, so that they will pass up to the groove d, when the two parts A and B are turned slightly and 45 locked together by the pins b entering the groove d. The upper or outer end of the part B is closed by means of a covex wad, C. This wad is secured in position when the cartridge-shell is in process of manufacture, so 50 that the shot can be placed in this part of the shell and its lower end closed by means of a wad, D, which latter is composed of a basepiece, f, (see Fig. 7,) and a convex piece, g, (made of paper, felt, or other suitable materail,) secured together by means of a cord,  $h_2$  55 and the edges of the base-piece f are turned up over the convex piece g.

When the two parts A and B have respectively been charged with powder and shot, and a wad D placed over each, they are pressed to- 60 gether to be locked. The convex parts of the wads will come together and be compressed, packing the powder and shot and forcing the turned-up edge of the base-piece f hard against the inside of the shell, so that when the two 65 parts are locked together the two wads D D will be flat, or nearly so, as shown in Fig. 4. By this construction the shell can be loaded without the employment of any machine, all that is required being to place the proper 7c quantity of powder and shot in the respective parts of the shell and place a wad D on the top of them, then bring the two parts of the shell together and press them until the pins b enter the groove d, then slightly turn the two parts, 75 and they are securely locked together, and the powder and shot packed to the required de-

Although I have shown and described the wads D of peculiar construction, I have not so claimed the same, as I intend to make the said wads the subject of a future application, and wads of the ordinary kind can be used in place of the wads shown.

Instead of a male-and-female joint construct- 85 ed on the principle of the bayonet joint, as shown, any other suitable joint may be employed.

What I claim as my invention is—

A sectional cartridge shell composed of the 90 two parts A and B, connected together by a suitable locking joint, the upper part, B, for holding shot, being provided with a convex wad, C, at its outer end, and at its inner end with a wad, D, composed of a base-piece, f, 95 to which is secured by means of a cord, h, a convex piece of paper, felt, or metal, g, the upper end of the part A being provided with a compressible wad, D, substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HOSEA W. LIBBEY.

Witnesses:

J. H. Adams, E. PLANTA.