W. HUNT.

Cartridge.

No. 5,699 Patented Aug. 10, 1848.

Fig: 1.

Fig: 2.

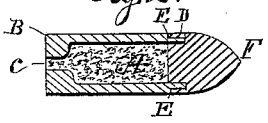

Fig: 3

Fig: 4.

Fig: 5.

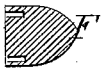

Fig: 6.

UNITED STATES PATENT OFFICE.

WALTER HUNT, OF NEW YORK, N. Y.

IMPROVED METHOD OF ATTACHING A BALL TO A WOODEN CARTRIDGE.

Specification forming part of Letters Patent No. 5,699, *dated August* 10, 1848.

To all whom it may concern:

Be it known that I, WALTER HUNT, of the city, county, and State of New York, have invented a new and useful Plan of Making Wooden Cartridges for Fire-Arms, and also a new method of connecting the same with the ball to be used therewith, and that the following is a faithful description of said invention:

In the manufacture of said cartridges I use wood of a soft texture—the American basswood I find preferable. I make them externally (see Fig. 1 in the annexed drawings) in the form of a cylindrical ferrule or cup, having a similar formed internal cavity, A, with a thick bottom, B, formed all of the same piece. Through the center of said bottom is a small perforation, C, through which the charge is ignited by the priming. (See horizontal cut section, Fig. 2, rear end view, Fig. 3, and front end view, Fig. 4.) The front or open end of said cartridge is formed into a circular tenon, D, having a shoulder at E, which tenon is made to fit into a corresponding mortise or circular recess cut or otherwise formed in the rear end of the ball F. (See Fig. 5, which shows a longitudinal cut section of the same as separated from the cartridge, and Fig. 6 a rear end view.)

In the process of filling these cartridges a small wad or pledget of gun-cotton being first introduced into the perforation C, the cartridge in a vertical position is then filled with powder, when the rear end of the ball is forced down upon the powder into the end of the cartridge, while the tenon D enters the cavity or mortise F in the end of the ball, by which means the powder is properly compressed and the ball and cartridge become firmly united together, which may be done with facility in a mold or tube fitted to the size of the cartridge by hand, machinery, or otherwise.

It will be observed that this plan of a cartridge is exclusively designed for loading at the breech, for the reason that the wooden cartridge is always left in the breech of the barrel and fired out in front of each succeeding ball.

The advantages of the wooden cartridge over any other material used for loading at the breech are, first, when the piece is discharged the expansive force and heat of the powder fractures or splits the thin portion of the cylinder down to near the bottom into four equal and uniform staves, which are separated at the muzzle of piece by the atmospheric resistance, leaving the ball to pass undisturbed in its course between them; second, while in the barrel the wooden cartridge retains its form without adhering to the barrel, however foul the piece may be, and in passing out operates like a wiper, in consequence of its soft texture, without injuring the cut of the smoothest rifle; third, it retains a uniform shape, and when introduced is not liable to become distorted and hang in the tube, especially if previously saturated with tallow, in which case it is rendered water-proof.

In the above described ball and cartridge I do not claim or use a loaded ball, or a ball that contains any portion of the charge; neither do I use or claim a metallic cartridge or a cartridge any portion of which is formed of metal; but

What I do claim, and desire to secure by Letters Patent, is—

The mode or plan of connecting the said cartridge to said ball—that is, by means of an annular flange and recess on and in the rear end of said ball, which recess receives, and which flange incloses the ferrule or circular tenon which forms the open end of said cartridge, thereby forming, combining, and uniting said ball and cartridge, substantially as above set forth and described.

WALTER HUNT.

Witnesses:

JOHN M. KENT,

JNO. W. CHAPIN.