W. HUNT.

Cartridge.

No. 5,701. Patented Aug. 10. 1848.

Fig. 1.

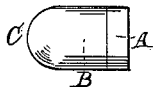

Fig. 5.

Fig. 2.

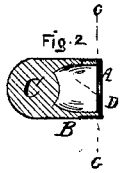

Fig. 4.

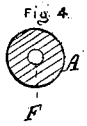

Fig. 3.

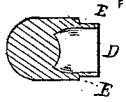

Fig. 6.

UNITED STATES PATENT OFFICE.

WALTER HUNT, OF NEW YORK, N. Y., ASSIGNOR TO GEO. A. ARROWSMITH.

LOADED BALL.

Specification forming part of Letters Patent No. 5,701, *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 Improvement in the Construction of a Metallic Cartridge, made entire with the ball, for fire-arms, which I term a "rocket-ball;" and I do hereby declare that the following is a true and faithful description of the same.

Figure 1 in the annexed drawings is an external longitudinal view of said rocket-ball, which is charged, ready for use. Upon the open end of the cartridge is fitted a thin sheet-metal cap, A. Upon the opposite front end of B (the cartridge) projects one-half of the ball C, which, all together, resembles the ordinary top-thimble.

Fig. 2 gives a longitudinal cut-sectional view of the same, showing the internal structure of the cap A, cavity D in the cartridge B, and its junction with the ball C.

The dissected longitudinal cut-section, Fig. 3, shows the cap A separated from the flange or neck formed by the shoulder, at the dotted line E, upon the rear end of B.

Fig. 4 is an end or face view of A, which in form resembles the Chinese gong, with a central perforation, F, in its discous head, which is the point of ignition from the priming. Over this perforation, upon the inside face of said cap, is placed a thin water-proof tissue or seal. (See Fig. 2, at the dotted line G, and face view, Fig. 6.) This seal may be made of any thin material through which the fire from the priming may penetrate, and which will at the same time secure the powder in the cartridge from escape or accidental injury.

This ball and thimble should be formed in molds by pressure. The powder being well packed in the cavity D, the cap A, lined with the seal G, being fixed upon the flange, and pressed up to the shoulder E, should then be subjected to a second pressure, in order to fix the cap firmly and produce a uniformity in the size of the cartridges.

It will be readily perceived that this plan of a combined ball and cartridge is well adapted to fire-arms made to be charged at the breech, from the fact that in firing this ball the cap A is left in the breech, with its head or disk pressed firmly against the breech-plug, and its rim or flange forced outward against the inner periphery of the caliber of the barrel, forming an air-tight stopper, which effectually prevents all backward escape of the powder, notwithstanding the breech-plug may be loosely fitted in the breech of the barrel behind the charge, which must necessarily be the case in all reciprocating breech-pins in order to prevent their binding from heat, deposits, &c., in rapid firing. It is also obvious that, in guns made with piston breech-pins, the cap A in my plan would be carried out forward of each succeeding ball, operating as an effectual wiper to the barrel at each discharge of the piece.

What I claim in the above-described invention, and desire to secure by Letters Patent, is—

The construction of a ball for fire-arms, with a cavity to contain the charge of powder for propelling said ball, in which cavity the powder is secured by means of a cap inclosing the back end of the same, substantially as described.

WALTER HUNT.

Witnesses:
EDMD. ELMENDORF, Jr.,
CHAS. E. GRIM.