

(No Model.)

W. M. THOMAS.
CARTRIDGE SHELL FOR PRACTICE SHOOTING.
No. 531,233.

Patented Dec. 18, 1894.

Fig. 1.

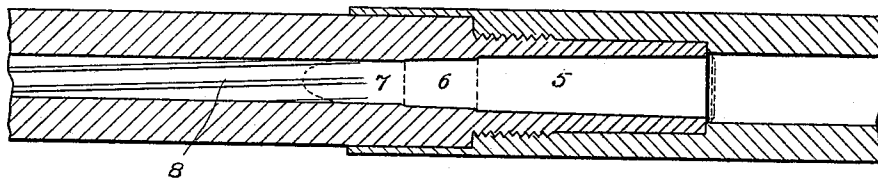


Fig. 2.

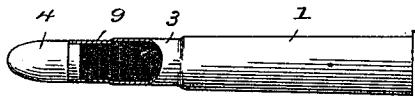


Fig. 3.

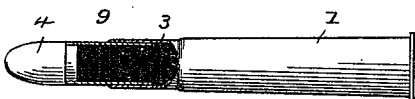
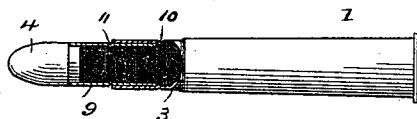


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM M. THOMAS, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE
UNION METALLIC CARTRIDGE COMPANY, OF SAME PLACE.

CARTRIDGE-SHELL FOR PRACTICE SHOOTING.

SPECIFICATION forming part of Letters Patent No. 531,233, dated December 18, 1894.

Application filed March 16, 1894. Serial No. 503,841. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. THOMAS, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Cartridge-Shells for Practice Shooting; 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 has for its object to provide a cartridge shell for long range military rifles which shall be especially adapted for target practice at short range.

It is of course well understood that standing armies and militia are being armed as rapidly as possible with rifles of various types which with ordinary cartridges are reasonably accurate at from two thousand to two thousand five hundred yards, also that ordinary cartridges manufactured for this class of rifles are not well adapted to practice shooting at short range, for example at a range of forty yards; and also that cartridges used in any class of rifles in order to produce accuracy in shooting must fit the chamber of the rifle accurately. It is furthermore well known that the powder chambers of cartridges for this class of rifles have a greater diameter than the bullet, long conical bullets of comparatively small caliber being used in connection with powder chambers of considerably greater diameter so as to provide for heavy charges of powder for long range shooting. In order that the users of this class of rifles may be provided with cartridges especially adapted for accurate short range shooting I have devised the novel cartridge shell of which the following description in connection with the accompanying drawings is a specification, numbers being used to designate the several parts.

Figure 1 is a section of the breech and chamber of an ordinary military rifle barrel the cartridge being indicated by dotted lines. Figs. 2, 3 and 4 are illustrations partly in elevation and partly in section of my novel cartridge shell for practice shooting illustrating slightly different modes in which I have carried my invention into effect.

1 denotes the powder chamber of a cartridge shell, 2 an ordinary long bullet and 3 the neck of the shell which receives the base of the bullet.

In my improved cartridge shell parts 2 and 3 are of ordinary construction. The corresponding bullet however, which I have designated by 4 is very much shorter and could not be used in connection with the regular cartridge shell. This will be obvious from Fig. 1 in which 5 represents the portion of the chamber of the rifle which receives powder chamber 1 of the cartridge, 6 the portion of the rifle chamber which receives portion 3 of the cartridge and 7 the bullet seat or portion of the rifle chamber in which a long bullet is received, the grooves which are designated by 8 running out in portion 7 of the rifle chamber.

It will be obvious that under any circumstances in order to secure accuracy in shooting the bullet must fit closely in portion 7 of the rifle chamber which is expressly formed to receive long bullets. It follows therefore that accuracy in shooting would be impossible with this class of rifles if short bullets were used in connection with cartridge shells of ordinary size and length as the bullets would not fit the portion 7 of the rifle chamber. In order to provide a cartridge shell adapted to receive a short bullet and which shall be adapted to long range military rifles but will produce accuracy in shooting at short range I provide cartridge shells having portions 9 made of sheet metal and which are of the same external diameter as the bases of long range bullets so that this portion of the cartridge shell will accurately fit portion 7 of the rifle chamber in which the points of the bullets will be closely seated in engagement with the ends of the grooves as is clearly indicated in Fig. 1.

It should be understood that the novelty of my invention consists in providing cartridge shells with sheet metal portions 9 adapted to engage portion 7 of the chambers of rifles without regard to how said portions 9 are formed. In Fig. 3 I have shown portion 9 as formed integral with the neck of an ordinary long range cartridge shell. In Fig. 4 I have shown portion 9 as made in the form of an independent tube and secured in place in any suit-

able manner as by soldering, and I have shown
portion 9 as made in the form of an independ-
ent tube the base of which rests against a
groove 10 which is turned in portion 3 of an
5 ordinary cartridge shell and have shown the
tube as secured in place by turning in the end
of the shell as at 11.

Having thus described my invention, I
claim—

10 A sheet metal cartridge shell consisting of
a single metal shell having the ordinary pow-
der chamber 1, and the reduced or "bottle-
necked" part 3, said bottle-necked part being

still further reduced to form the extension 9,
the interior of said shell conforming substan- 15
tially in configuration to the exterior, where-
by a short projectile may be used in said car-
tridge shell without altering the external con-
figuration, substantially as described.

In testimony whereof I affix my signature in 20
presence of two witnesses.

WILLIAM M. THOMAS.

Witnesses:

A. M. WOOSTER,
S. V. RICHARDSON.