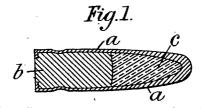
No. 867,508.

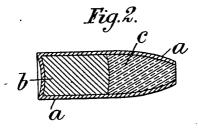
PATENTED OCT. 1, 1907.

H. W. HOLLAND & T. WOODWARD.

PROJECTILE FOR RIFLED SMALL ARMS.

APPLICATION FILED FEB. 12, 1907.





Witnesses M. Silian adams. E. B. Franzoll. Henry lim. Holland Thomas Goodward By their attorneys, Baldwin Wight

UNITED STATES PATENT OFFICE.

HENRY WILLIAM HOLLAND AND THOMAS WOODWARD, OF WILLESDEN, ENGLAND.

PROJECTILE FOR RIFLED SMALL-ARMS.

No. 867,508.

Specification of Letters Patent.

Patented Oct. 1, 1907.

Application filed February 12, 1907. Serial No. 356,994.

To all whom it may concern:

Be it known that we, Henry William Holland, residing at 98 New Bond street, and Thomas Woodward, residing at 8 Crediton road, Willesden, both in 5 the county of Middlesex, England, gunmakers, subjects of the King of Great Britain, have invented new and useful Improvements in Projectiles for Rifled Small-Arms, of which the following is a specification.

Projectiles for rifled small arms as at present made often consist of an outer case of hard metal (such as nickel) entirely filled with a heavy metal such as lead and it has also before been proposed to insert wooden and other plugs in the noses of lead projectiles.

According to this invention we employ an outer case as before but only fill its rear part with heavy metal, the front part or nose being filled with light material such as wood or other substance having a 20 specific gravity not much greater than that of wood.

The object of this improvement is to decrease the specific gravity of the projectile, at the same time retaining the ordinary length or even increasing the length and thereby increasing the velocity of the

projectile without increasing the pressure upon the 25 interior of the small arm.

Figure 1 is a longitudinal section (to a scale of twice full size) of a projectile for a military rifle constructed according to this invention and Fig. 2 is a similar view of a sporting projectile.

In these figures a is the nickel case, b is lead and c is wood.

In Fig. 1 the wood and lead are introduced at the rear of the case which is then closed by spinning while in Fig. 2 they are introduced at the nose the 35 base being solid.

What we claim is:-

1. A projectile consisting of an outer case, a filling of lead for the rear portion of the case, and a wood filling for the front portion thereof.

2. A projectile consisting of an outer case, a filling of high specific gravity for the rear portion of the case and a filling for the front portion of the case the specific gravity of which is considerably less than half that of the first mentioned filling.

HENRY WILLIAM HOLLAND. THOMAS WOODWARD.

Witnesses:

H. D. JAMESON, A. NUTTING.