

Aug. 5, 1924.

1,504,144

H. ROMBERG

PROJECTILE

Filed June 28, 1921

Fig. 1.

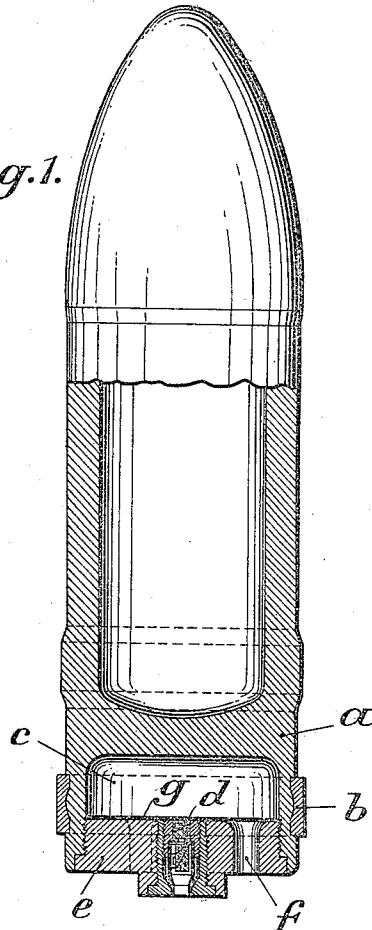
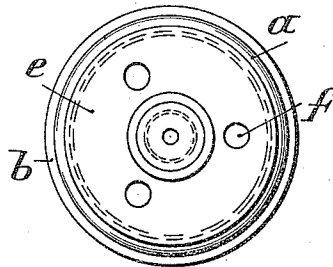


Fig. 2.



INVENTOR
Hennrich Romberg
BY *W. L. Hill and Magnusson*
ATTORNEYS

UNITED STATES PATENT OFFICE.

HEINRICH ROMBERG, OF DUSSELDORF, GERMANY, ASSIGNOR TO THE FIRM OF
RHEINISCHE METALLWAAREN- UND MASCHINENFABRIK, OF DUSSELDORF-
DERENDORF, GERMANY.

PROJECTILE.

Application filed June 28, 1921. Serial No. 481,067.

(GRANTED UNDER THE PROVISIONS OF THE ACT OF MARCH 3, 1921, 41 STAT. L., 1313.)

To all whom it may concern:

Be it known that I, HEINRICH ROMBERG, a citizen of Germany, residing at Dusseldorf, Germany, 25 Parkstrasse, have invented certain new and useful Improvements in Projectiles, of which the following is a specification.

The invention relates to projectiles in which the driving charges are placed in the rear part of the projectiles. According to the invention, between the driving charge and the base which is provided with holes, there is a cover plate which acts as a closing member to prevent the immediate escape of the driving gases generated on ignition.

In the accompanying drawing, Fig. 1 shows the projectile partly in longitudinal section and Fig. 2 the base of the projectile. The body *a* of the projectile is fitted in known manner with a guiding ring *b* at its rear part to form a gas-tight packing between the projectile and the gun barrel. A hollow space *c* is provided for receiving the driving charge and is closed by the base *e* provided with an ignition device *d* of any suitable construction. The base *e* has apertures *f* to allow for the escape of the gases generated. The apertures *f* are closed by a thin cover plate *g* between the driving charge and the base *e*. This plate *g* prevents the gases generated after ignition from immediately escaping through the holes *f*. Before the gases escape the pressure must be raised sufficiently to fracture the plate *g* at the holes *f*. Consequently, the gases from the commencement act more energetically on

the projectile than they would if the cover plate were omitted and the gases generated gradually commenced to act on the projectile at a lower pressure. The invention always obtains a more complete and rapid combustion of the driving charge and obviates any powder residues which are liable to remain at slower combustion.

In order that there should be no pieces detached from the cover plate *g* which may be similar to the form of the apertures of the base *e* and which could remain in the barrel after firing, the edges of the apertures *f* are rounded off on the inside. Consequently, the fracture of the cover plate would be approximately radial and the broken parts could not escape through the apertures.

Having thus described my invention, what I claim is:—

1. A projectile having a space to contain the driving charge, a base closing said space and formed with apertures, and a thin plate closing said apertures and located between said base and the driving charge.

2. A projectile having a space to contain the driving charge, a base closing said space and formed with apertures having rounded edges, and a thin plate closing said apertures and located between said base and the driving charge.

In testimony whereof I have affixed my signature in presence of two witnesses.

HEINRICH ROMBERG.

Witnesses:

JOHANNES FLIEVEDER,

RICHARD ELSINGHAIN.