

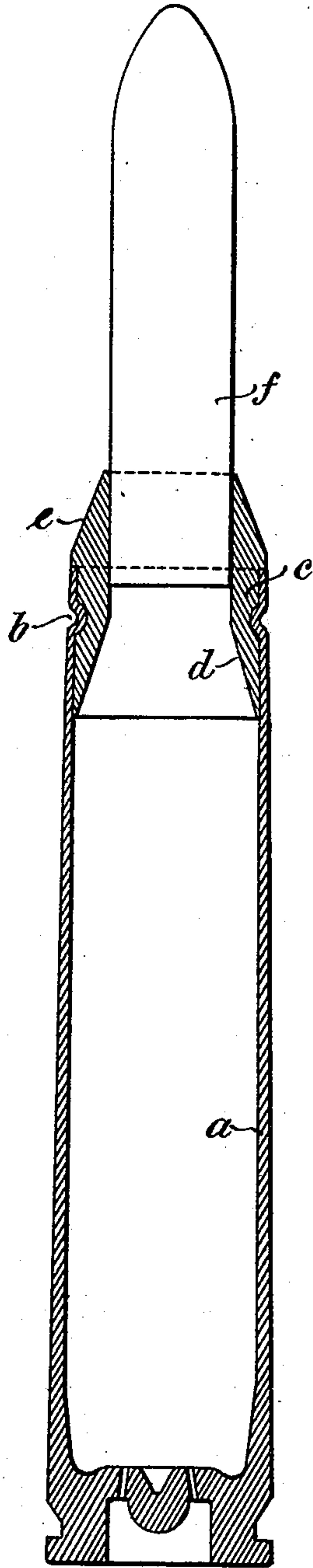
No. 607,868.

Patented July 26, 1898.

P. MAUSER.
METALLIC CARTRIDGE.

(Application filed Feb. 1, 1898.)

(No Model.)



Witnesses:
J. Sprigg Poole
E. R. Johnson

Inventor.
Paul Mauser.
by Herbert W. Jenner.
Attorney.

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UNITED STATES PATENT OFFICE.

PAUL MAUSER, OF OBERNDORF, GERMANY.

METALLIC CARTRIDGE.

SPECIFICATION forming part of Letters Patent No. 607,868, dated July 26, 1898.

Application filed February 1, 1898. Serial No. 668,699. (No model.)

To all whom it may concern:

Be it known that I, PAUL MAUSER, manufacturer of guns, a subject of the King of Württemberg, residing at Oberndorf - on - the Neckar, in the Kingdom of Württemberg and Empire of Germany, have invented a new and useful Metallic Cartridge, of which the following is a specification.

This invention relates to metallic cartridges for use especially in arms of small bore, the characteristic feature being a ring of aluminium or other suitable metal which is inserted in the front of the cylindrical or slightly conical cartridge-casing and which retains the projectile in position. The bore of this ring widens toward the rear and forms a conical opening which joins the inner wall of the cylindrical casing, while the front of the ring forms a conical abutting surface adapted to rest against a correspondingly-shaped surface provided in the interior of the breech.

The accompanying drawing represents a cartridge constructed according to my invention drawn on an enlarged scale.

a indicates the cylindrical metallic casing, having a ring *c* inserted at its front, the connection between the parts *a* and *c* being advantageously effected by forming an annular groove *b* around the same. The bore of the ring *c* widens toward the rear, thereby forming a gradual incline, which finally joins the inner wall of the casing *a* and which allows, as far as possible, free passage to the propelling-gases from the casing *a* on the explosion of the charge.

The conical front part *e* of the ring *c* surrounding the projectile *f* forms a fairly steep abutting surface against the breech and is thus the means for firmly lodging the cartridges, especially those known as "rimless" cartridges. The base of the conical projecting portion *e* abuts against the end of the shell or casing *a* and prevents the ring from being forced too far into the shell. The front portion of the casing *a*, as far as it incloses the ring *c*, is advantageously made slightly conical, being smaller at the mouth,

and thus renders its extraction from the breech more easy and prevents jamming.

In addition to the advantages already mentioned it may be stated that another essential advantage is gained by dispensing with the formation of the reduced neck of the cartridge, especially with respect to small-bore arms, and further by the proper choice of dimension for the ring *c*. An easy regulation of the explosion-chamber is possible without alteration of the exterior form of the cartridges, while finally in recoil-loaders better results are obtained regarding the action of the propelling-gases.

The improved cartridge is also suitable for use in quick-firing machine-guns, on the ground that the tearing off of the end of the cartridge-case is altogether precluded when extracting the cartridge.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. The combination, with a cartridge-shell, of a ring for carrying the projectile, said ring being secured in the mouth of the shell and provided with a projecting conical portion, substantially as set forth.

2. The combination, with a cartridge-shell, of a ring for carrying the projectile, said ring being secured in the mouth of the shell and provided with a projecting portion which abuts against the end of the shell, substantially as set forth.

3. The combination, with a cartridge-shell, of a ring for carrying the projectile, said ring being secured in the mouth of the shell and provided with a projecting conical portion the base of which abuts against the end of the shell, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

PAUL MAUSER.

Witnesses:

CHAS. H. DAY,
HENRY HASPER.