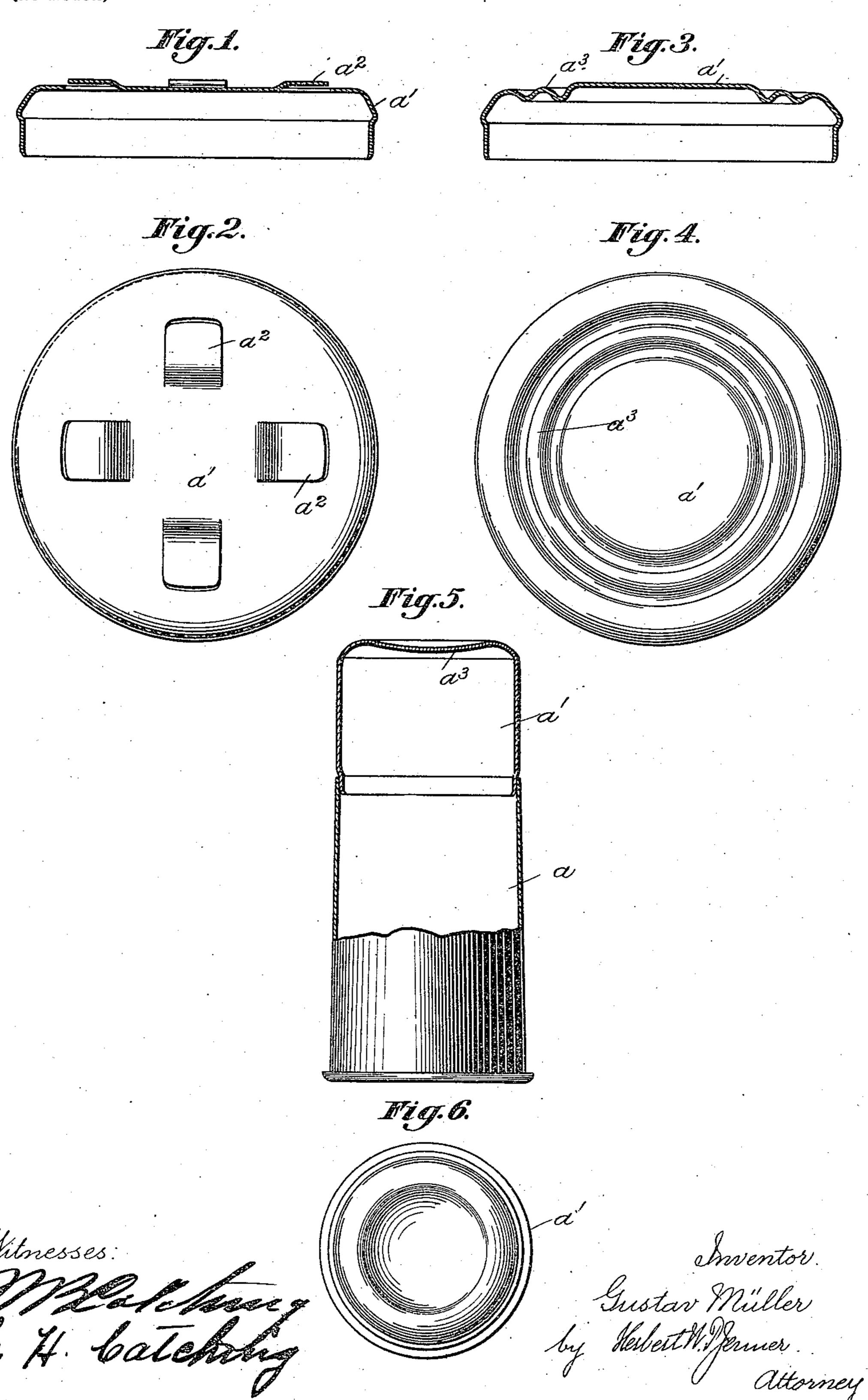
G. MÜLLER. CARTRIDGE.

(Application filed Feb. 25, 1901.)

(No Model.)



United States Patent-Office.

GUSTAV MÜLLER, OF DUSSELDORF, GERMANY, ASSIGNOR TO FIRM RHEINISCHE METALLWAAREN-UND MASCHINENFABRIK, OF DUSSELDORF-DERENDORF, PRUSSIA, GERMANY.

CARTRIDGE.

SPECIFICATION forming part of Letters Patent No. 705,949, dated July 29, 1902.

Application filed February 25, 1901. Serial No. 48,709. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV MÜLLER, manager, a subject of the King of Prussia, German Emperor, residing at Dusseldorf, Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Cartridge-Caps; 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.

This invention relates to cartridges used in guns; and it consists of a cap for the cartridge provided with a spring portion for the pro-

15 jectile to bear against.

In the drawings, Figure 1 is a transverse section of the cap or cover of a cartridge constructed according to the present invention. Fig. 2 is a plan thereof. Fig. 3 is a similar view to Fig.1, illustrating a modification. Fig. 4 is a plan thereof. Fig. 5 is a sectional elevation of a cartridge-case having an elongated cap according to the present invention, and Fig. 6 is a plan thereof.

25 The cartridge case or shell a is of any approved construction and is adapted to contain the firing charge. A metallic cap a' is attached to the cartridge-case and is provided with a yielding spring portion at its front end 30 for the projectile to bear against when the

gun is loaded.

In the cap shown in Figs. 1 and 2 the spring portion consists of spring-tongues a^3 , struck up from the metal which forms the end of the cap.

In the caps shown in Figs. 3 to 6, inclusive, 35 the spring portion consists of one or more corrugations a^3 , formed in the end of the cap and which yield in the same manner as the spring-

When the projectile is driven into the gun, 40 it bears against the spring end portion of the cap. The height of the cap is made so that the projectile takes a prearranged position in the gun with respect to the firing charge, and the spring portion or end compensates for 45 slight variations in the length of the cartridges and prevents the projectile from injuring the cap.

What I claim is—

1. A metallic cap for a cartridge provided 50 with a yieldable spring end portion for the projectile to bear against, substantially as set forth.

2. The combination, with a cartridge-shell, of a metallic cap closing the front end of the 55 shell and provided with a yieldable spring end portion, substantially as set forth.

3. A cap for a cartridge provided with spring-tongues struck up from the metal of its end portion, substantially as set forth.

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

GUSTAV MÜLLER.

Witnesses:
William Essenwein,
Peter Lieber.