(No Model.)

A. MIEG & H. BISCHOFF.

WOLFRAM PROJECTILE.

No. 382,717. Patented May 15, 1888.

Fig. 1.

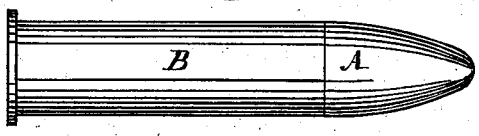
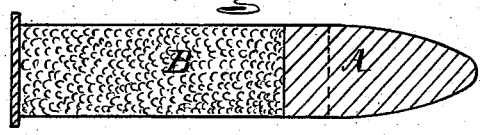


Fig. 2.



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UNITED STATES PATENT OFFICE.

ARMAND MIEG, OF LEIPSIC, SAXONY, AND HUGO BISCHOFF, OF DÜRKHEIM, BAVARIA, GERMANY.

WOLFRAM PROJECTILE.

SPECIFICATION forming part of Letters Patent No. 382,717, dated May 15, 1888.

Application filed June 30, 1884. Serial No. 136,500 (No model.) Patented in Germany November 26, 1882, No. 22,891; in Belgium March 13, 1883, No. 60,734; in England April, 12, 1883, No. 1,849; in Austria-Hungary July 13, 1883, No. 10,686 and No. 29,692; in Italy June 30, 1884, XVIII, 16,886, and XXXIII, 330, and in France July 19, 1884, No. 163,389.

To all whom it may concern:

Be it known that we, ARMAND MIEG, a subject of the King of Bavaria, and a resident of Leipsic, Saxony, and HUGO BISCHOFF, a subject of the King of Bavaria, and a resident of the city of Dürkheim, Bavaria, Germany, have invented certain new and useful Improvements in the Manufacture of Wolfram Projectiles, (for which we have obtained patents in the following countries to wit: in Germany, No. 22,891, dated November 26, 1882; in France, No. 163,389, dated July 19, 1884; in England, No. 1,849, dated April 12, 1883; in Austria, No. 10,686, tome 33, folio 1360, and Hungary, No. 29,692, tome XVII, folio 1345, dated both July 13, 1883; in Italy, Reg. Gen. folio XVIII, No. 16,886, and Reg. attest volume XXXIII, No. 330, dated June 30, 1884, and in Belgium, No. 60,734, dated March 13, 1883,) of which the following is a specification.

The object of our invention is to produce a projectile made of metallic tungsten or wolfram (chemical symbol W) instead of metallic cast lead, as heretofore.

Referring to the drawings, Figure 1 is a side view of our projectile, showing the same inserted in a cartridge. Fig. 2 is a sectional view of same.

A is the projectile; B, the cartridge.

Heretofore projectiles have been made of cast lead; but we make our projectile of tungsten or wolfram, as it yields a particularly low trajectory or curve by reason of its high specific gravity, which is 17.4. It also has a greater penetrating power than lead.

The general composition of the cartridge B may remain unchanged.

We do not confine ourselves to the size or shape of the projectile, as any desirable deviation may be made. In order to attain the same effect as with projectiles made of lead, together with increased security and greater range, our projectile, made of tungsten or wolfram, may be made of a smaller size. This is of great importance, as the caliber of fire-arms can in consequence be reduced.

The projectile can be made of metallic tungsten or wolfram either cast or pressed. It may, also, be made from powdered tungsten or wolfram produced either by mechanical or chemical means, freed from all impurities and solidified.

Two advantages are gained by making our projectile of wolfram: first, it produces low trajections, and, second, greater penetrating power. The usual leaden projectiles of all existing fire-arms can, however, be replaced by wolfram projectiles of smaller caliber without altering the weapon.

Having thus described our invention, we desire to claim—

As a new article of manufacture, a projectile made of metallic tungsten or wolfram, substantially as described.

In testimony that we claim the foregoing as our invention we have signed our names in the presence of two subscribing witnesses.

ARMAND MIEG.
HUGO BISCHOFF.

Witnesses:
B. ROI,
C. ZIMMERMAN.