

(No Model.)

J. C. PETMECKY
Bullet.

No. 233,114.

Patented Oct. 12, 1880.

Fig. 1.

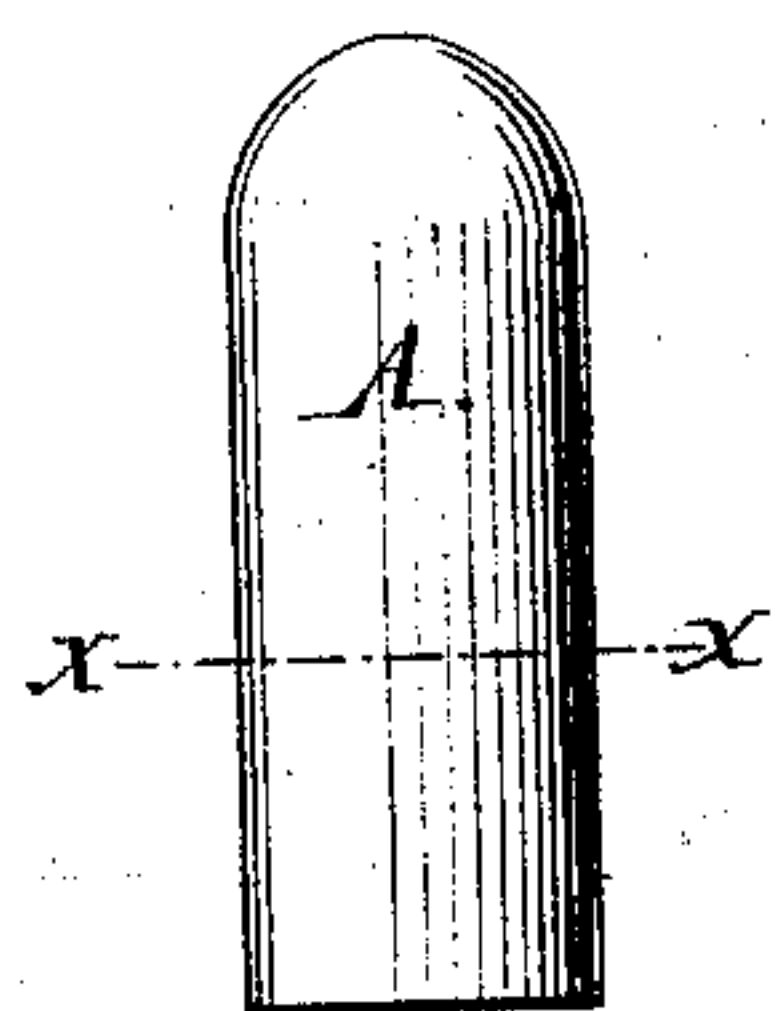


Fig. 2.

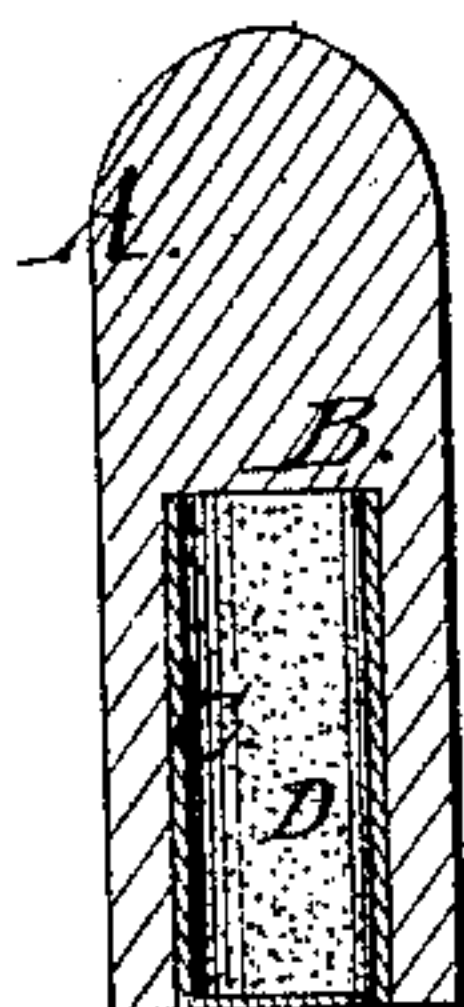


Fig. 3.

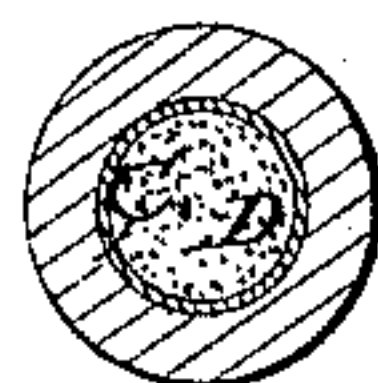
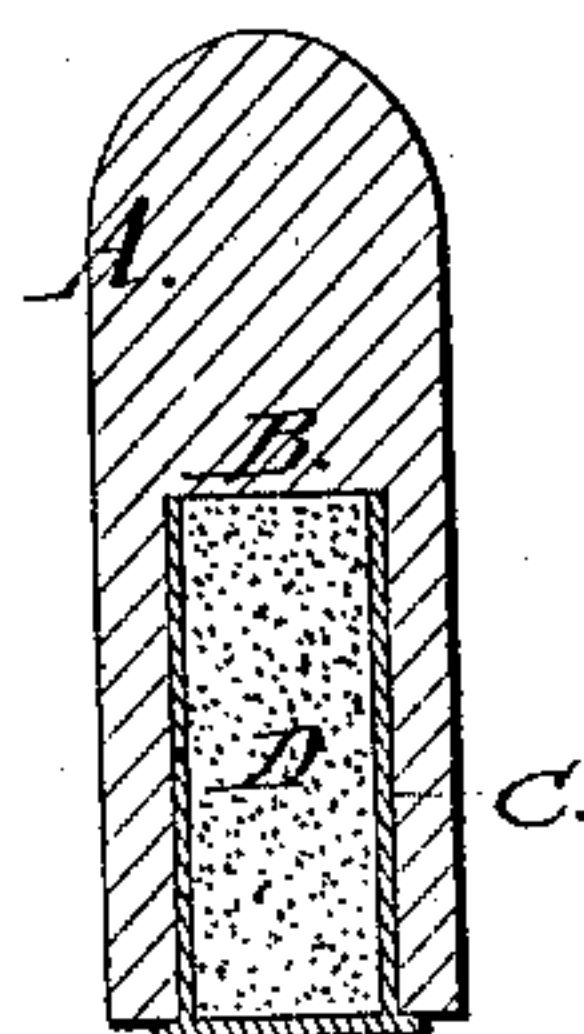


Fig. 4.



Witnesses:

E. Wallingford
James Timberley

Inventor:

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A. N. Marr
Atty.

UNITED STATES PATENT OFFICE.

JOSEPH C. PETMECKY, OF AUSTIN, TEXAS.

BULLET.

SPECIFICATION forming part of Letters Patent No. 233,114, dated October 12, 1880.

Application filed March 8, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH C. PETMECKY, of Austin, in the county of Travis and State of Texas, have invented certain new and useful
5 Improvements in Bullets; 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, reference
10 being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

It consists, in combination with a bullet hollow at its base, of a tube of metal or other flexible material closed at one end and open at the
15 other and filled with wax or other plastic or liquid substance, said tube, when so filled, being placed in the deep cavity with the closed end outward even with the bullet's base, as
20 will be hereinafter more fully referred to.

In my drawings, Figure 1 is an elevation of the bullet. Fig. 2 is a longitudinal section through the bullet. Fig. 3 is a transverse section cut on line *xx* of Fig. 1. Fig. 4 is a longitudinal section, showing the tube with a flange
25 on its closed end.

Similar reference-letters indicate like parts in all of the figures.

Referring to drawings, A is the bullet, provided with a cavity, B, running from the base to about half the length. The bullet is made in the elongated and pointed form and cut square at the base.

A hollow cylindrical tube, *c*, formed of metal
35 or other flexible material, about the diameter of the cavity B, and closed at one end, is adapted for insertion into the bullet from the base, after being filled with wax or other soft or yielding substance.

40 In the use of the flexible tube filled with soft material I insert said tube in the cavity with its open end inward and its closed end flush with the base-surface of the bullet. When the powder is ignited and the expanding gases set free the pressure received on the
45 thin base of said tube will cause an equal expansion on the inner surface of the rim of the tube, (the soft substance yielding,) which, in turn, presses the metal of the bullet outward to impinge upon the inner surface of the
50 barrel of the gun the entire depth of said cavity, forming of that portion of the bullet a true cylinder.

I am aware that bullets have been used with both deep and shallow cavities at their bases 55 to receive the expansive force of the powder to force the metal into the rifle-grooves of the gun; but in practice it is found that the force exerted by the powder does not act upon the metal to any considerable depth of the cavity, 60 and consequently an insufficient bearing only is afforded and a wobbling motion is the result.

By expanding the bullet against the inside of the barrel or into the rifle-grooves, by means 65 of the tube filled with soft material the depth in proportion shown in my bullet you give the surface a greater bearing to steady the motion of the bullet, or when rifling is used a stronger bearing is gained. 70

My bullet is well adapted for use in guns with smooth, rifled, or any other kind of bore, and its peculiarities will render it capable of more accurate shooting than that of any of which I am aware, even when a short barrel is used. 75 I ordinarily make the closed end of the tube which I insert in the cavity of my bullet so that when inserted said end will come flush with the bullet's bore. When, however, the cavity is made larger and the walls of the 80 bullet surrounding said cavity are thin, there is a liability of the tube being pressed through and separating the solid part of the bullet from the shell forming its base; and to avoid this possibility I sometimes use a flange at the 85 closed end of the tube somewhat similar to the percussion-flange of a cartridge, the shoulder of which, when said tube is placed, rests against the rear surface of the bullet's base.

Having thus described my invention, what I 90 claim as new, and desire to secure by Letters Patent, is—

In combination with a hollow bullet, the tube C, filled with soft plastic material, constructed as described, to be inserted in the 95 cavity with its open end inward, for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of February, 1880.

JOSEPH C. PETMECKY.

Witnesses:

WM. H. HUDDLE,
THOMAS W. SMITH.