(No Model.)

F. P. LANGFITT.

BULLET.

No. 388,496. Patented Aug. 28, 1888.

Fig. 1.

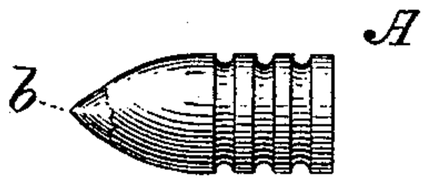


Fig. 2.

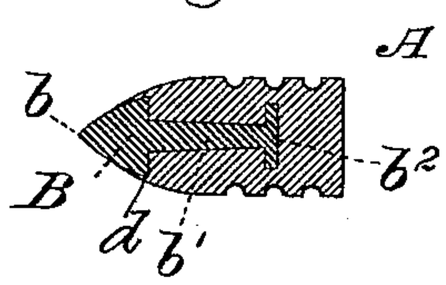
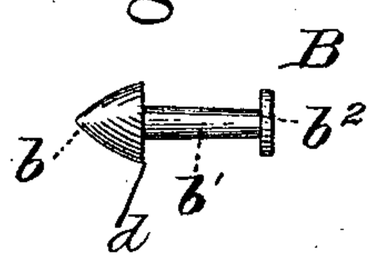


Fig. 3.



WITNESSES:

C. M. Clarke.

C. Newell.

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Att'y.

UNITED STATES PATENT OFFICE.

FRANCIS P. LANGFITT, OF PITTSBURG, PENNSYLVANIA.

BULLET.

SPECIFICATION forming part of Letters Patent No. 388,496, dated August 28, 1888.

Application filed April 7, 1888. Serial No. 269,909. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS P. LANGFITT, of Pittsburg, county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Needle-Pointed Bullets; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which, like letters indicating like parts—

Figure 1 is a view of a bullet completed in accordance with my invention. Fig. 2 is a longitudinal and vertical section of the same through the center; and Fig. 3 is a view of the steel plug or core, needle-pointed, around which the lead body of the bullet is molded.

The object of my invention is to provide a bullet which will, as a rule, penetrate cleanly and clearly the object which it strikes, instead of flattening out, as does the ordinary bullet; and I also wish to produce a bullet which will meet with a smaller amount of atmospheric resistance in proportion to its size than the ordinary bullet, and thus be less liable to be swerved from its course after leaving the gun.

In furtherance of these ends my invention consists in providing the ordinary leaden bullet with a steel needle-pointed tip and core, around which the body of the bullet is molded, leaving exposed only the needle-point of the core and a very small portion of the core back of the point.

Referring to the drawings, in order to illustrate more fully the invention, the entire bullet is represented as A. The steel plug or core is shown as B, the needle-point of the same being designated as *b*, and the shank as *b'*, and the anchor as b^2.

In the preparation of the steel core I make use of a small piece of steel, which I reduce to the proper shape, as shown in Fig. 3, by turning it down in a lathe, or it may be cast in such shape to begin with, if thought desirable. I prefer that the core should be brought substantially to the shape as shown in the drawings, the point *b* being needle-pointed and swelling out at the angle desired for the shape of the bullet, which may be more or less acute, and then falling off in an abrupt offset or shoulder to form the shank *b'*, which continues the length of the core, widening at the end to form the anchor b^2.

I consider it essential to the effective working of my device that the point of the steel tip be made as sharp as possible; hence I refer to it as needle-pointed, this shape adding materially to the accuracy of flight of the projectile, and also to its power of penetration.

The formation of what I term the "anchor" b^2, in connection with the shaft *b'*, with its shoulder or offset *d* at the forward end of the core, is adapted to solidify the core in its seat within the body of the bullet. In striking an object, particularly if it be a hard substance, the tendency is to drive the point back into the body of the bullet; but the anchor being so formed as to present a considerable surface to receive the force of the shock there is but little chance of its being driven back. This form of construction enables the lead of the body of the bullet, when molded, to become firmly seated around the core and to maintain a secure hold upon the same, assuming the form shown in section at Fig. 2. It also prevents the core from coming in contact with the barrel of the rifle and thereby injuring the same.

My invention is intended for use more particularly in what may be termed "fine shooting," where accuracy and efficiency in execution is desirable, so that by preference I use a projectile somewhat elongated beyond and at the rear of the core, as both experience and mathematics have demonstrated that the elongated and sharply-pointed form are best adapted to accuracy and long range.

I am aware that steel-pointed bullets have been in use, and I do not broadly claim such a device; but I wish it to be understood that the construction herein shown and the manner of combining the steel point and core with the body of the bullet are new.

What I claim is—

A needle-pointed bullet having the steel-pointed core B, with a shoulder or offset, *d*, and a leaden body, the said body extending over the shoulder or offset and covering a portion of the conical end of the core, whereby said core is prevented from coming in contact with the barrel of the fire-arm, substantially as specified.

In testimony whereof I have hereunto set my hand.

FRANCIS P. LANGFITT.

Witnesses:

HOMER L. CASTLE,

C. NEWELL.