(No Model.)

W. A. HEISLER.

BULLET.

No. 421,932. Patented Feb. 25, 1890.

Fig. 1.

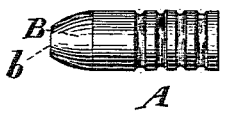


Fig. 2.

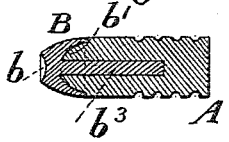
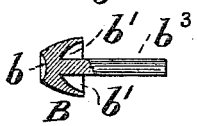


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM ALLEN HEISLER, OF PRESCOTT, ARIZONA TERRITORY.

BULLET.

SPECIFICATION forming part of Letters Patent No. 421,932, dated February 25, 1890.

Application filed June 26, 1889. Serial No. 315,581. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM ALLEN HEISLER, a citizen of the United States, residing at Prescott, in the county of Yavapai and Territory of Arizona, have invented certain new and useful Improvements in Bullets; and I do 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 being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

Figure 1 of the drawings is a side elevation; Fig. 2, a central longitudinal section; Fig. 3, a longitudinal section of the bullet-head, showing also its shank.

In the drawings, A represents the leaden body of the bullet, and B the head, made of hard metal, preferably steel. The head is provided with the cavity *b* in front, the hollow rear projection *b'*, and the integral shank b^2. The lead is cast or swaged, so as to surround the shank tightly and fit closely into the cavity under the projection *b'*, while its entire outer surface is kept flush with or lower than the highest part of the projection *b'*, so as to prevent the lead from being rolled back as the bullet penetrates. The steel or iron points or heads and their shanks may be made of any length and thickness to suit the form and caliber of the intended bullet on which they are to be used; but they are most valuable for bullets of small caliber, as the penetration of one of my thirty-two-caliber bullets will equal that of an ordinary forty-five-caliber bullet now in use.

As the bullet is constructed by me the steel point extends back just far enough to escape contact with the rifling of the barrel of the fire-arm as it is shot out, and when the bullet strikes an object the steel point breaks the way and makes a hole through which the lead passes without being rolled back. This increases its power of penetration about two hundred per cent. The cavity *b* is made in the front of the hard-metal point, so that when used in magazine-rifles the steel or iron point may not come in contact with the center of the primer of the cartridge and produce an explosion. This is especially important in repeating-rifles. A bullet with a sharp or a round point is unsafe in a magazine where center-fire cartridges are used.

Without hard-metal heads bullets flatten by contact with the butt-end of the cartridge-head in the magazine, and this is caused by the shock in firing or suddenly dropping the fire-arm. The effect is to impair the shape and accuracy of the bullet.

What I claim as new, and desire to protect by Letters Patent, is—

1. A bullet having a steel point, with the concavity *b* in front, for use in magazine-rifles using center-fire cartridges, for the purpose specified.

2. A leaden bullet having a steel point, with a hollow rear projection *b'* and a straight shank b^2, for the purpose set forth.

3. A bullet formed of a steel point and leaden body, the latter having its whole outer surface flush with or lower than the highest part of said point, for the purpose described.

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

WILLIAM ALLEN HEISLER.

Witnesses:
M. MCINERWAY,
J. W. AKERS.