

C. ROSS.
BULLET.
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949,028.

Patented Feb. 15, 1910.

Fig. 1.

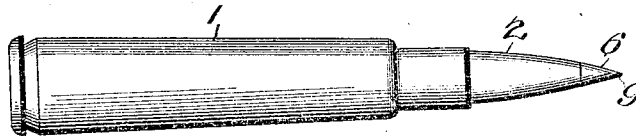


Fig. 2.

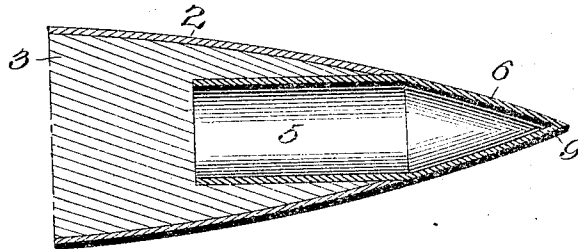


Fig. 3.

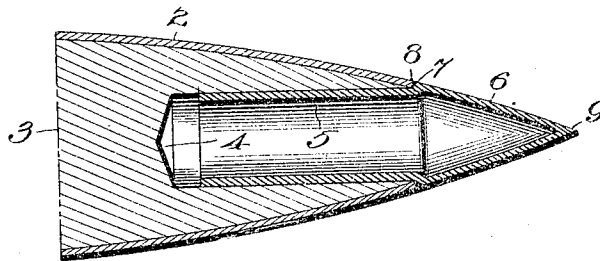
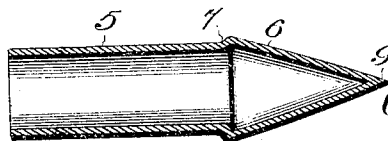


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

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BULLET.

949,028.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES ROSS, baronet, a subject of the King of Great Britain, residing at Balnagown Castle, Rossshire, Scotland, have invented certain new and useful 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.

My invention relates to bullets for fire arms, and has for its object the production of a sharp nosed bullet that will readily open out upon striking the body of an animal, and thereupon produce an explosive or mushrooming effect, and will at the same time be not liable to have its point distorted during transportation, or while in the magazine.

To these ends my invention consists in a sharp nosed bullet provided with a cavity, and a shell or tube filling said cavity provided with a point coming under the classification of what is known as a sharp pointed bullet.

Referring to the accompanying drawings forming a part of this specification in which like numerals refer to like parts in all the views:—Figure 1, is an elevational view of a cartridge provided with a sharp nosed bullet having my improvement; Fig. 2, a sectional detail of a modified form of the shell of the bullet shown in Fig. 1; Fig. 3, a sectional detail of the nose of the preferred form of bullet; and Fig. 4, a sectional view of the shell detached from the bullet.

1, represents the body of the cartridge; 2, the outer jacket of a modern sharp nosed bullet; 3, the filling material of said bullet; and 4, a cavity in said filling material. 5, represents a shell having a tapered point 6, provided with a contour forming a continuation of the contour of the bullet proper, and preferably provided with a shoulder 7, fitting against the ends 8 of the jacket 2.

The shell must be of a material sufficiently hard to withstand transportation and use in magazines without undergoing distortion; for if the extreme tip or point 9 becomes blunted or crushed the sharp nosed bullet will no longer be accurate in flight, as is well known. And again, if this material is too hard, while the bullet will retain its shape and be accurate in flight, yet, at the same time the tapered point 6 will fail to

collapse upon striking the body of an animal, and the explosive or mushrooming effects will be lost.

I have found that lead is too soft a substance for the shell 5, unless it be made too thick to be successful, and steel is too hard unless it be made very thin.

In operation, if the bullet strikes the body of an animal, it at once produces an explosive or mushrooming effect, due probably to the collapsing of the tapered point 6 and the after sudden expansion of the air imprisoned in the cavity 4, although of course I do not limit myself to this theory of action. At lower velocities the bullet mushrooms, and the destructive effects are less.

It is well known that while no difficulty is experienced in causing blunt nosed bullets to mushroom, yet it has been heretofore an exceedingly difficult problem to provide a sharp nosed bullet which will be absolutely accurate in flight, and yet will break up with certainty upon impact against the soft parts of an animal's body. This difficulty, however, is readily solved by making the tapered point of the shell 5 conform to the exact contour of the regular sharp nosed bullet, and forming it of a material neither too hard nor too soft for the uses to which the bullet is to be put. I have found that hard drawn copper is a suitable material and that it possesses the right qualities of softness and resistance, but of course any other material coming between the limits above stated may be used.

Of course, I do not wish to be limited to the exact details of construction shown, except as is required by the claims, for it is evident that those skilled in the art may modify my invention without departing from the spirit thereof.

What I claim is:—

1. A sharp nosed bullet provided with a tapered portion and with a tapered hollow collapsible tip conforming to and constituting a smooth continuation of the lines of a sharp nosed bullet, said tip being sufficiently soft to produce an explosive effect when striking the body of an animal at high velocities and sufficiently hard to resist distortion during transportation, substantially as described.

2. A sharp nosed bullet provided with a cavity; a shell in said cavity provided with a tapered collapsible tip constituting a continuation of the lines of said sharp nosed

bullet; said tip formed of a material sufficiently soft to produce an explosive effect upon impact at high velocities and a mushrooming effect at lower velocities and sufficiently hard to resist the wear and tear of transportation and magazine uses, substantially as described.

3. A sharp nosed bullet provided with a cavity; a collapsible shell filling said cavity
10 formed of copper, provided with a tapered tip constituting a continuation of the con-

tour of said bullet; and provided with a shoulder fitting against the extreme end of the body of said bullet, substantially as described.

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

CHARLES ROSS.

Witnesses:

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