Nov. 24, 1931. A. J. HARTZ 1,833,645

BULLET

Filed Nov. 8, 1929

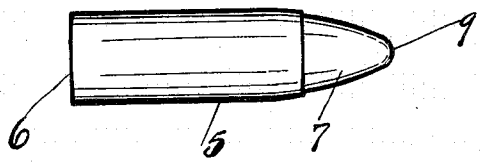


Fig-1-

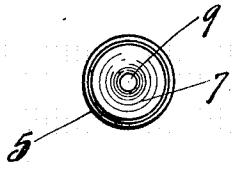


Fig-2-

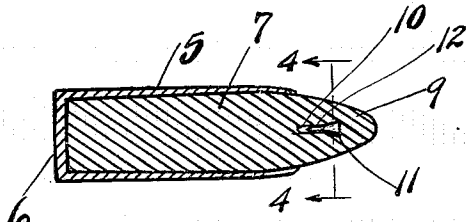


Fig-3-

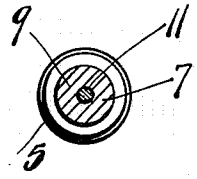


Fig-4-

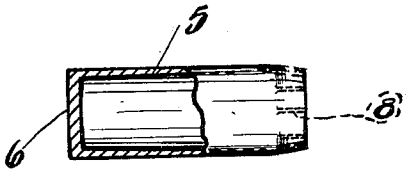


Fig-5-

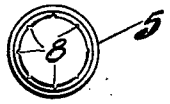


Fig-6-

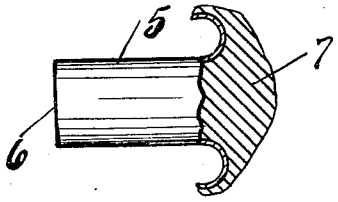


Fig-7-

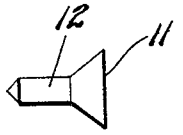


Fig-8-



Fig-9-

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UNITED STATES PATENT OFFICE

ALBERT J. HARTZ, OF BAY CITY, MICHIGAN

BULLET

Application filed November 8, 1929. Serial No. 405,661.

This invention relates to projectiles, and more particularly to the class known as expanding bullets for use in small-arms.

The prime object of the invention is to design an expanding bullet of the soft nose type, of small diameter and elongated form, capable of being fired at high velocities without prematurely breaking up, but which will readily expand when meeting any considerable resistance.

Another object is to develop a bullet especially adaptable for hunting, which when fired will expand with an explosive action when meeting any considerable resistance, such as the thick flesh of an animal, and will consequently leave a larger hole, so that if the animal is not hit in a vital spot, the flow of blood through the larger hole will "drop" the animal more quickly than the conventional bullet which must strike a bone in order to expand the core.

Another object is to provide a comparatively soft nosed bullet having an elongated chamber or pocket formed therein, and in which a hard center slug or wedge is mounted, and which assists in the expansion of the bullet the instant it strikes the target.

A further object is to provide a shell having spaced apart vertically disposed grooves on the interior of the jacket, so that when the bullet strikes a solid mass of flesh, the shell will split in these grooves into an umbrella shape over which the core metal will ball.

The above and other objects will appear as the specification progresses, reference being had to the accompanying drawings in which I have shown the preferred embodiment of my invention, and in which like reference numerals indicate like parts throughout the several views thereof.

In the drawings.

Fig. 1 is an elevation of a bullet embodying my invention.

Fig. 2 is an end view thereof.

Fig. 3 is a longitudinal vertical sectional view.

Fig. 4 is a transverse sectional view taken on the line 4—4 of Fig. 3.

Fig. 5 is a side view of the shell or jacket in its preferred form, a part being broken away and also showing the grooves in the jacket.

Fig. 6 is an end view thereof.

Fig. 7 is a part sectional view illustrating the bullet expanded.

Fig. 8 is a side view of the slug or center wedge.

Fig. 9 is an end view thereof.

As previously stated it is the prime object of the invention to produce a bullet, which will expand when striking a considerable resistance such as a solid mass of flesh, so that a larger hole will result and with greater destructive effect. Conventional bullets in general use today must strike a vital spot, or must contact with a bone before expanding, consequently, in hunting animals, the bullets which do not strike in a vital spot, or which do not strike a bone, produce a small opening so that bleeding is retarded, enabling the animal to run for miles and out of reasonable range of the hunter, the animals then in many instances drop or lie down from weakness and die, the hunter loses the game, the meat is wasted and the hunter continues to hunt until he shoots and brings down another animal, thus two animals are slaughtered, where one would suffice, and I therefore claim that my improved bullet will conserve the supply of game.

Referring now to the drawings, the numeral 5 indicates the shell or jacket of the bullet, this consists of a suitable tube one end 6 forming the head of the bullet, the opposite end being open and is adapted to receive the core metal 7 in the usual manner, the open end of the tube being formed with vertically disposed grooves 8 for a purpose to be presently described.

The core is made up of semi-soft lead or lead alloy, the tip 9 being slightly blunt, and a chamber or pocket 10 is provided in the core at a point spaced from the end, so that the balance will not be disturbed, the lower end of the chamber being preferably slightly tapered as shown.

A hard slug or wedge 11 is mounted in this chamber 10, and can be of any desired configuration, in the present instance I have shown it conical in shape, the lower end

having a reduced shank portion 12, and I wish to direct particular attention to the fact that the chamber is of greater length than the wedge and that the wedge is formed of a harder metal, so that at the instant of impact of the bullet with the target, the hard wedge will be driven into the reduced end of the chamber, expanding and disrupting the core metal which splits the jacket, so that it will expand umbrella shape, and the core metal ball up over the disrupted end as clearly shown in Fig. 7 of the drawing, continued progress of the bullet therefore leaves a large opening, which is continuous from the point of impact until it has spent its force, bleeding will therefore be more free and an animal will usually drop within easy hunting range of the hunter.

It will therefore be obvious that I have perfected a very simple, practical, and economical bullet which will disrupt with practically an explosive action at the instant of impact with the target, and which can be easily and readily manufactured and assembled.

What I claim is:—

1. A jacketed expandible bullet including a core provided with a pocket therein and spaced from the tip thereof, and a wedge in the outer end of said pocket for expanding said bullet at the instant of impact with a target.

2. A jacketed expandible bullet including a core having a closed pocket therein and spaced from the tip thereof, a wedge mounted in the outer end of said pocket, said wedge being of shorter length than said pocket for expanding said bullet at the instant of impact with a target.

3. A jacket expandible bullet including a shell provided with grooves in the upper end thereof, a core mounted in the shell, a closed pocket in said core and spaced from the tip thereof, and a wedge in the outer end of said pocket for expanding the bullet when said bullet contacts with a target.

4. A jacketed expandible bullet including a shell having vertically disposed grooves in the upper end thereof, a core mounted in the shell, an elongated closed pocket in the core and spaced from the tip thereof, and a wedge mounted in the upper end of said pocket for expanding the bullet at the instant of contact with a target.

In testimony whereof I hereunto affix my signature.

ALBERT J. HARTZ.