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N. DARDEN
EXPLOSIVE PROJECTILE
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2,304,152

Fig. 1.

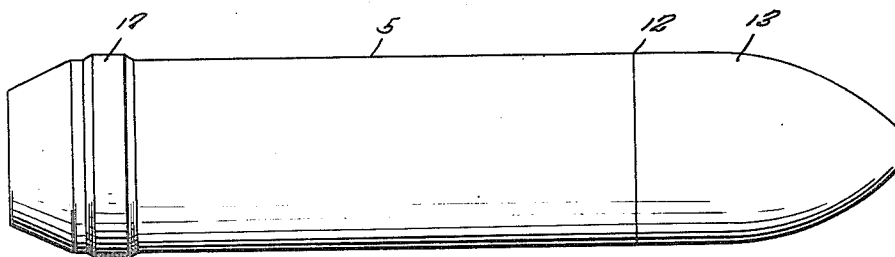


Fig. 2.

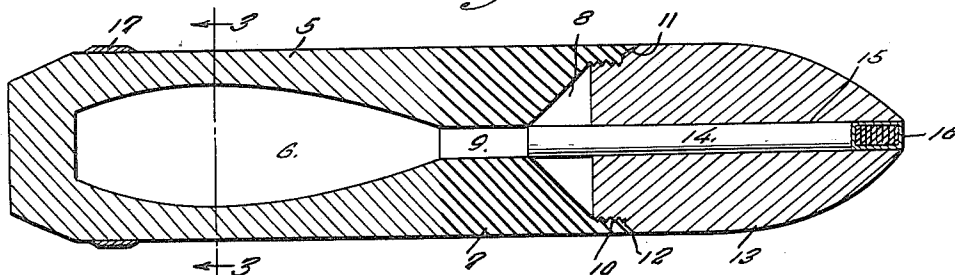
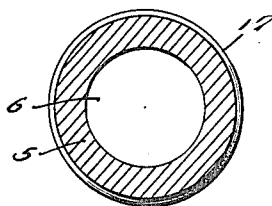


Fig. 3.

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UNITED STATES PATENT OFFICE

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EXPLOSIVE PROJECTILE

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1 Claim. (Cl. 102—56)

This invention relates to projectiles and particularly to high explosive type projectiles.

The primary object of the invention is to provide a slow burning type fuse in an explosive projectile in order to delay the detonation of the charge.

Another object of the invention is to provide an armor piercing soft nosed projectile.

Other objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawing, wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is a side elevational view of my invention.

Figure 2 is a longitudinal sectional view of the invention.

Figure 3 is a transverse sectional view taken substantially on the line 3—3 of Fig. 2.

Referring now to the drawing in detail, it will be seen that the reference numeral 5 designates the charge holding or body portion of the projectile, which is constructed of tool steel or similar suitable metal, with a chamber 6 formed therein for the reception of a charge of T. N. T. or other high explosive charge. The end portion 7 of the body 5 is constructed of case hardened steel or the like and has a threaded recess 8 formed therein which communicates with the chamber 6 through a small bore 9 filled with slow burning powder. The end portion of the portion 7 of the body 5 adjacent the threads 10 is beveled as best shown at 11 in Fig. 2 of the drawing to provide a cutting edge 12 for piercing armor plates or the like.

The nose or front portion 13 of the projectile is constructed of an alloy of copper and brass or other suitable material and is threaded for engagement with the body portion 5 of the projectile when the device is assembled. The reference numeral 14 designates a tube, of suitable material which is charged with an instant burning powder and inserted in the bore 15 of the nose 13. The front end portion of tube 14 contacts an impact fuse 16 in bore 15. The back portion of the tube 14 extends from the nose 13 and passes through the recess 8 to connect with the bore 9 when the parts are assembled.

A copper rotating band 17 is mounted around the body portion 5 near the back end portion

thereof and functions to rotate the projectile when it passes through the rifling of a gun when fired therefrom.

When the projectile strikes an object after discharge from a gun the fuse 16, upon contact, is set off thus igniting the powder in the tube 14 which in turn ignites the slow burning powder in the bore 9 which sets off the charge of T. N. T. in the body 5 shattering the same. When the projectile, after firing, contacts armor plate or the like the soft nose 13 will become misshapen and permit the cutting edge 12 to pierce the armor plate thus the explosion of the body portion 5 will occur within or in back of the armor plate. The recess 8 will receive a portion of the soft nose 13 upon impact with armor plate or the like.

Although I have shown and described herein a preferred embodiment of my invention, it is to be definitely understood that I do not desire to limit the application or the invention thereto, and any change or changes may be made in the materials, and in the structure and arrangement of parts, within the spirit of the invention as claimed.

What is claimed is:

A projectile comprising an elongated cylindrical body having a chamber therein for receiving an explosive charge, the front end of the body having a conical recess therein with said front end of the body being extended to form a cylindrical part terminating in a beveled cutting edge, such cylindrical extension forming a forward continuation of the recess, said body also having a bore of small diameter therein connecting the rear end of the recess with the front end of the chamber and adapted to contain slow burning powder, a nose forming part having its rear end reduced and threaded to the cylindrical extension of the body and said nose forming portion, forwardly of the reduced threaded part, being beveled to engage the beveled cutting edge at the front end of the body, said nose having a longitudinally extending bore therein passing through its front end, a tube passing through the bore of the nose and the recess and extending into the front end of the bore of the body, said tube containing a fast burning powder and an impact fuse in the front end of said bore of the nose.

NEIL DARDEN.