Jan. 10, 1933. O. F. SCHROEDER 1,893,787

TORPEDO DART

Filed May 7, 1932

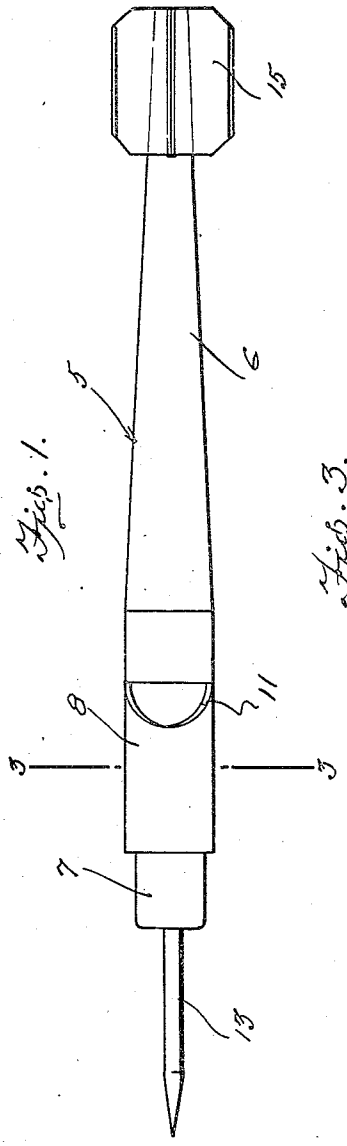

Fig. 1.

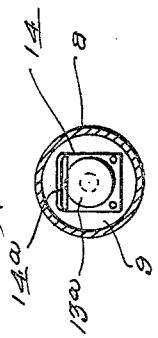

Fig. 3.

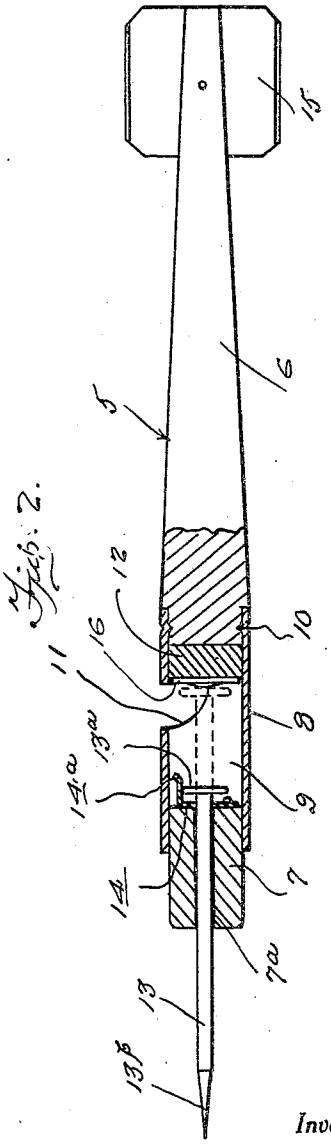

Fig. 2.

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UNITED STATES PATENT OFFICE

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TORPEDO DART

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This invention relates to toys and is what may be termed a torpedo dart, and consists of a dart equipped with detonating means adapted to explode when the dart comes into forcible contact with an immovable body, as for example when the dart is thrown against a wall, target or the like.

The invention together with its object and advantages will be best understood from a study of the following description, taken in connection with the accompanying drawing wherein:

Figure 1 is a plan view of the torpedo dart.

Figure 2 is a side view thereof, certain parts being broken away and shown in section, and

Figure 3 is a transverse sectional view taken substantially on the line 3—3 of Figure 1.

Referring more in detail to the drawing it will be seen that the invention comprises a dart designated generally by the reference character 5 and including a substantially solid body tapering toward one end and made of metal, paper, celluloid or other suitable material. The body 5 is separated transversely into a relatively elongated main section 6 and a relatively short end section 7. A sleeve 8 of metal or other suitable material provides a concussion chamber 9 for the dart and also serves to couple the sections 6 and 7. In this connection it will be noted that the largest end of the section 6 is telescopically received within one end of the cylinder 8 and at said one end the cylinder is pressed inwardly to provide a retaining rib 10 embedded within said end of the body section 6. The body section 7 has one end telescoped into the other end of the cylinder 8 and may be secured therein in any suitable manner. Adjacent its rib equipped end the cylinder 8 is provided with an opening 11 through which an explosive disk such as a "cap" or the like may be inserted into the combustion chamber 9 to fit against one face of an anvil 12, which anvil 12 is in the nature of a metallic disk fitting snugly within the cylinder or sleeve 8 in abutting relation with the proximate end of the body section 6.

The body section 7 has an opening 7*a* extending therethrough, and through the opening 7*a* extends a detonating plunger 13 that at its inner end is equipped with a disk like head 13*a* while at its outer free end the plunger 13 which is in the nature of a nail is sharpened as at 13*b*.

A spring keeper 14 is provided for normally retaining the plunger 14 in its projected or full line position shown in Figure 2 and the keeper 14 in the present instance is in the nature of a metallic apertured plate secured to the inner end of the body section 7*a* and equipped with a spring tongue 14*a* adapted to frictionally engage the head 13*a* of the plunger 13 when the latter is in its projected or full line position shown in Figure 2.

At the smallest end of the body section 6 of the dart there is provided pail or air vanes 15 suitably connected with the body, and the vanes 15 may be made of any suitable material, as for example metal, paper, celluloid or may be in the nature of feathers or as otherwise found desirable and suitable.

In actual practice the plunger 13 is first locked in its projected position and a cap or similar explosive element 16 is fitted snugly within the chamber 9 against one face of the anvil 12. The dart is then thrown toward a suitable target, the object, intent and purpose being to have the end 13*b* of the plunger driven into the target so as to hold the dart in position on the target thus showing the skill with which it was thrown.

It is manifest, that when the plunger 13 comes into contact with the target or other similar object that the body 5 will continue forwardly relative to the plunger 13 and the cap 16 brought into forceful contact with the head 13*a* of the plunger resulting in an exploding of the cap.

It is to be understood of course that instead of having the plunger 13 equipped with the pointed end 13*b* a rubber tip or a tip of other suitable yieldable material may be provided on the outer end of the plunger so that the dart may be thrown against other objects without injurious effect to such objects.

Even though I have herein shown and de-

scribed the preferred embodiment of the invention, it is to be understood that the same is susceptible of further changes, modifications and improvements coming within the scope of the appended claim.

Having thus described my invention, what I claim as new is:

A detonating-dart comprising a longitudinally tapered body divided transversely adjacent one end to provide a relatively elongated section and a relatively short section, a sleeve telescopically receiving one end of each of said body sections and serving to secure said body sections in longitudinal alinement with the confronting ends of said sections in relatively spaced relation, said sleeve forming between said ends of the body sections a chamber, and being also provided with a lateral opening whereby access to said chamber may be had adjacent the inner end of the longer body section, said short body section having an axial opening therethrough, a plunger slidable through the opening in said last-named body section, and provided at its outer end with a penetrating point, and at its inner end with a disc-like head, a percussion cap arranged in said chamber adjacent the inner end of the longest body section, and a spring clip secured to the inner end of the shorter body section and peripherally engaging the head of said plunger for normally retaining the latter in projected position.

In testimony whereof I affix my signature.

OTTO F. SCHROEDER.