

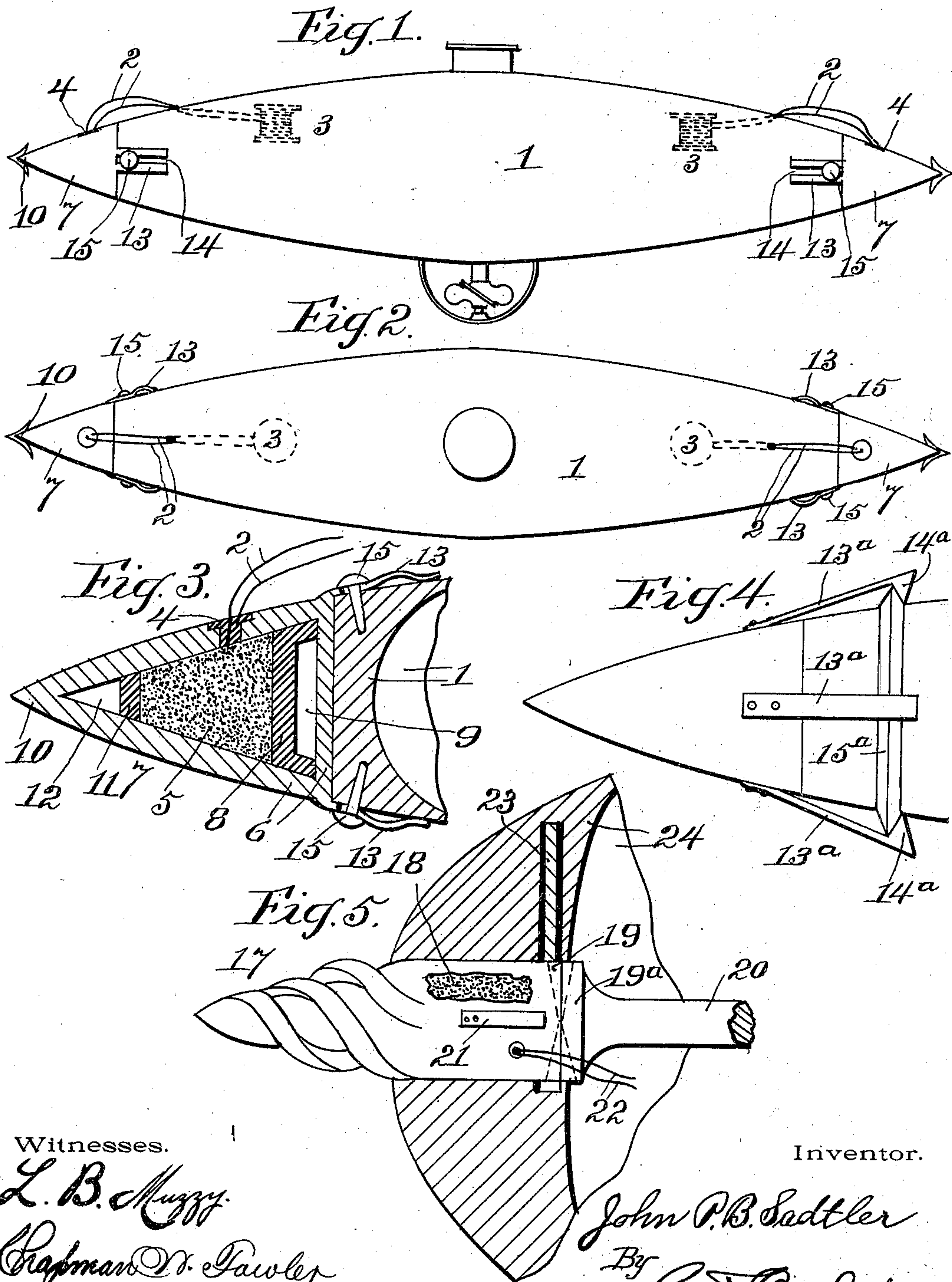
No. 625,851.

Patented May 30, 1899.

J. P. B. SADTLER.
TORPEDO ATTACHMENT FOR BOATS.

(Application filed May 21, 1898.)

(No Model.)



Witnesses.

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UNITED STATES PATENT OFFICE.

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TORPEDO ATTACHMENT FOR BOATS.

SPECIFICATION forming part of Letters Patent No. 625,851, dated May 30, 1899.

Application filed May 21, 1898. Serial No. 681,323. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. B. SADTLER, a citizen of the United States, residing at Baltimore city, in the State of Maryland, have invented certain new and useful Improvements in Torpedo Attachments for Boats, of which the following is a specification.

This invention relates to a torpedo attachment for submarine and other boats; and the prime object of the invention is to provide a torpedo or like explosive shell having a novel and peculiar piercing-point adapted to be forced into a ship or other vessel and carry the explosive into such vessel without explosion by impact or concussion and then exploded from the said boat after the latter has receded to a safe position.

A further object of the invention is to provide new and novel means for detachably connecting the torpedo to a boat, so that the latter may be retracted from the torpedo in pierced position without moving the torpedo or exploding it.

Other objects, advantages, and improved results accomplished by the device will be disclosed in the specification and claims to follow.

The invention consists in the novel construction and arrangement of parts, and resides, essentially, in a novel and peculiar detachable piercing-torpedo attachment for submarine boats to be exploded after the piercing and after the separation of the torpedo from the boat.

In the accompanying drawings, forming part of this application, Figure 1 is a side elevation of a boat with my invention applied. Fig. 2 is a top view. Fig. 3 is a longitudinal section of one end of a boat and my device on an enlarged scale. Fig. 4 is an elevation of modified means for connecting the boat and torpedo. Fig. 5 is a modified form of torpedo.

The same numeral references denote the same parts throughout the several figures of the drawings.

I will first describe a torpedo for piercing a ship or other vessel below the armor-plate or parts of a vessel not so protected.

The working parts of the boat 1 will not be shown or described, nor will the battery or insulators be treated, as they may be of the well-known forms and connected to the elec-

tric wires 2, carried by a reel 3, conveniently located in the boat 1.

The wires 2 are connected to a fuse block or cap 4, which seals the explosive material 5 in the shell portion 6 of the torpedo 7. This end or portion 6 is closed and provided with a packing-ring 8, of rubber or other suitable material, so as to form an air-chamber 9. The other end is composed of a solid piercing-point 10, provided with a similar packing 11, forming an air-chamber 12. The explosive material 5 is thus held proof against explosion by impact or concussion.

The means for detachably connecting the torpedo to the boat consists of two or more spring-plates 13, secured to or formed integral with the shell portion 6 and having a slot 14 engaged by studs or headed projections 15 on the boat. In attaching the torpedo the springs are forced under the stud-heads, which holds the shell end 6 hard against the end of the boat, and after the end or point 10 has pierced a ship the boat is retracted, which disengages the studs and springs. Then the boat is navigated to a safe distance, the electric wire unwinding from the reel as the boat recedes, and the torpedo fired or exploded in its pierced position from the boat at will. A modification of this means is shown in Fig. 4. The springs 13^a have V-shaped lugs 14^a, which engage a V-shaped rim 15^a on the boat.

The torpedo for piercing armor-plates or the iron portions of a ship has a piercing drill-point 17, a chamber 18 for explosive material, which chamber terminates in a coupling member 19 of the ordinary shaft-coupling type, the other coupling member 19^a being upon a shaft 20, revolved by suitable means inside the boat to have the drill bore through the armor-plate. The exterior of this torpedo has inlaid spring-arms 21, which engage the opening made by the drill to hold the torpedo in said opening while the shaft is uncoupled from the torpedo. The torpedo is then exploded, as hereinbefore explained, through the wires 22.

A gate or closure 23 is arranged to automatically drop and close the opening or hole in the end of the boat simultaneously with the uncoupling and releasing of the torpedo. This gate has suitable gaskets and is so ar-

ranged as to exclude water, and as it is no part of my invention it will not be treated in detail.

It will be observed that both forms of torpedo may be used upon the same boat, if desired, so that if the ship to be pierced be of such construction that one torpedo cannot be used this can be readily removed and replaced by the other.

The torpedoes are capable of being carried several of each kind in the boat, and when not in war the first-mentioned torpedo forms a very desirable boat end and is always ready in position for action, while the last-mentioned torpedo may form the other end of the boat, or it may be operated from the top, sides, bottom, or other portions of the boat to effect the same results in piercing a vessel.

It is obvious that the torpedoes may be carried by other means than the boat shown and that they may be exploded by other means and from other sources. I therefore do not wish to limit myself to any particular means for carrying the torpedoes or any special means for firing or exploding them.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a submarine boat, of a torpedo detachably connected to the boat and comprising an explosive portion, and a portion integral with and tapering from said explosive portion to form a piercing-point, whereby the whole torpedo may be carried into the object to be exploded, and means for connecting and disconnecting the torpedo with the boat without exploding it.

2. The combination, with a boat, of a torpedo detachably connected to the boat end and having one end formed into a shell containing an explosive, and the other end tapering from the shell end to form a piercing-point, the latter being drill-shaped, whereby the explosive may be carried into the object to be exploded.

3. The combination, with the boat, and the torpedo, of means to hold the torpedo to the boat, said means being operated by the backward movement of the boat to release the torpedo from the boat in pierced position.

In witness whereof I hereunto set my hand in the presence of two witnesses.

JOHN P. B. SADTLER.

Witnesses:

WM. J. ROTH,
ARTHUR W. ROBSON.