

W. GIESE.
Submarine-Torpedo.

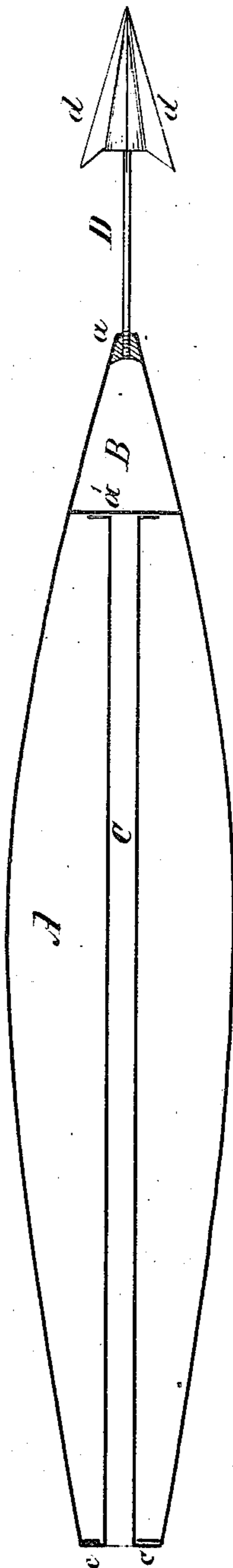
No. 219,711.

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Fig. 2.



Fig. 1.



Witnesses
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UNITED STATES PATENT OFFICE

WILLIAM GIESE, OF BORDEAUX, FRANCE.

IMPROVEMENT IN SUBMARINE TORPEDOES.

Specification forming part of Letters Patent No. 219,711, dated September 16, 1879; application filed June 20, 1879.

To all whom it may concern:

Be it known that I, WILLIAM GIESE, of the city of Bordeaux, in the Department of the Gironde and Republic of France, have invented new and useful Improvements in Submarine Self-Propelling Torpedoes, of which the following is a specification.

The object of the invention is to simplify the construction and cost of self-propelling submarine torpedoes, by doing away with all the complicated mechanism heretofore employed in the propulsion of such, and in arming the torpedo with a spear-head having two or more sharpened blades.

In the accompanying drawings representing the torpedo, Figure 1 is a vertical longitudinal section, and Fig. 2 a plan view.

A is the body of the torpedo, of a shape like a fish, with a tapering or pointed nose, *a*. Its sides are flattened, as shown in Fig. 2, and it is provided with a forward air-tight compartment, B, adapted to maintain the torpedo in proper position when propelled through the water and compensate in displacement the weight of the torpedo and its propelling charge or rocket C.

This rocket C is charged with the usual materials for such, and its forward end is attached to the partition *a'* of the air-tight compartment B, and its rear end is provided with a flange or rim, *c*, fitting snugly upon the face of the truncated rear end of the torpedo, to prevent the ingress of water. It may be set in motion either direct from the lower deck of a vessel, or from an inclined plane or ways arranged for the purpose, or from another boat, and it will be evident that when the fuse with which the rocket is provided is lighted, the composition thereof ignited, and the torpedo launched, the resistance of the water will cause its propulsion.

I have found by experience that great velocity may be obtained by this means, much greater than by means of the ordinary mechanisms employed, with the advantage of cheapness and certainty of action, which latter is not the case with torpedoes propelled by mechanism contained within them, which is liable to get out of order.

The torpedo is built of sheet metal, and is charged with the usual materials employed for the destruction of vessels at sea or in harbors.

The nose of the torpedo is provided with a

cutting-spear, D, composed of a series of blades, *d*, having their edges sharpened, and is attached to the torpedo by screwing it into its nose, as shown, or by any other convenient or preferred means.

It is evident that other forms than that described and shown may be given to the torpedo; but I prefer the fish shape with flattened sides.

The rocket is so arranged within the torpedo as to form an axis, so to say. The propelling power being thus evenly distributed over the whole length, and on a line central through the body, will keep it in the direction given it when launched, and, owing to its peculiar shape, the torpedo will go through the water with great rapidity.

On arriving in proximity to the vessel intended for destruction the spear-head will not only cut its way through the usual protecting netting employed, but will, on striking the hull of such vessel, embed itself therein and insure its destruction.

If desired, the spear-head may be made the means of igniting the explosive charge by so arranging it in a socket in the nose of the torpedo as to perform the function of a hammer upon the usual fulminate, which may be inclosed in a tube communicating with the charge-chamber or body of the torpedo, as will be readily understood.

The dimensions for the torpedo which I have found to be most advantageous are as follows: length, six meters; height, one meter, and breadth, fifty centimeters, though I do not desire to limit myself to these exact dimensions, which may under certain circumstances vary.

Having now described my invention, what I claim is—

A rocket-torpedo of a shape substantially as described, and provided with a forward air-tight compartment, in combination with a spear-head having a series of sharpened or cutting blades and a piercing-point, substantially as described, for the purpose specified.

In witness that I claim the foregoing I have hereunto set my hand this 27th day of November, 1878.

WILLIAM GIESE.

Witnesses:

ROBT. M. HOOPER,
M. SERAUL.