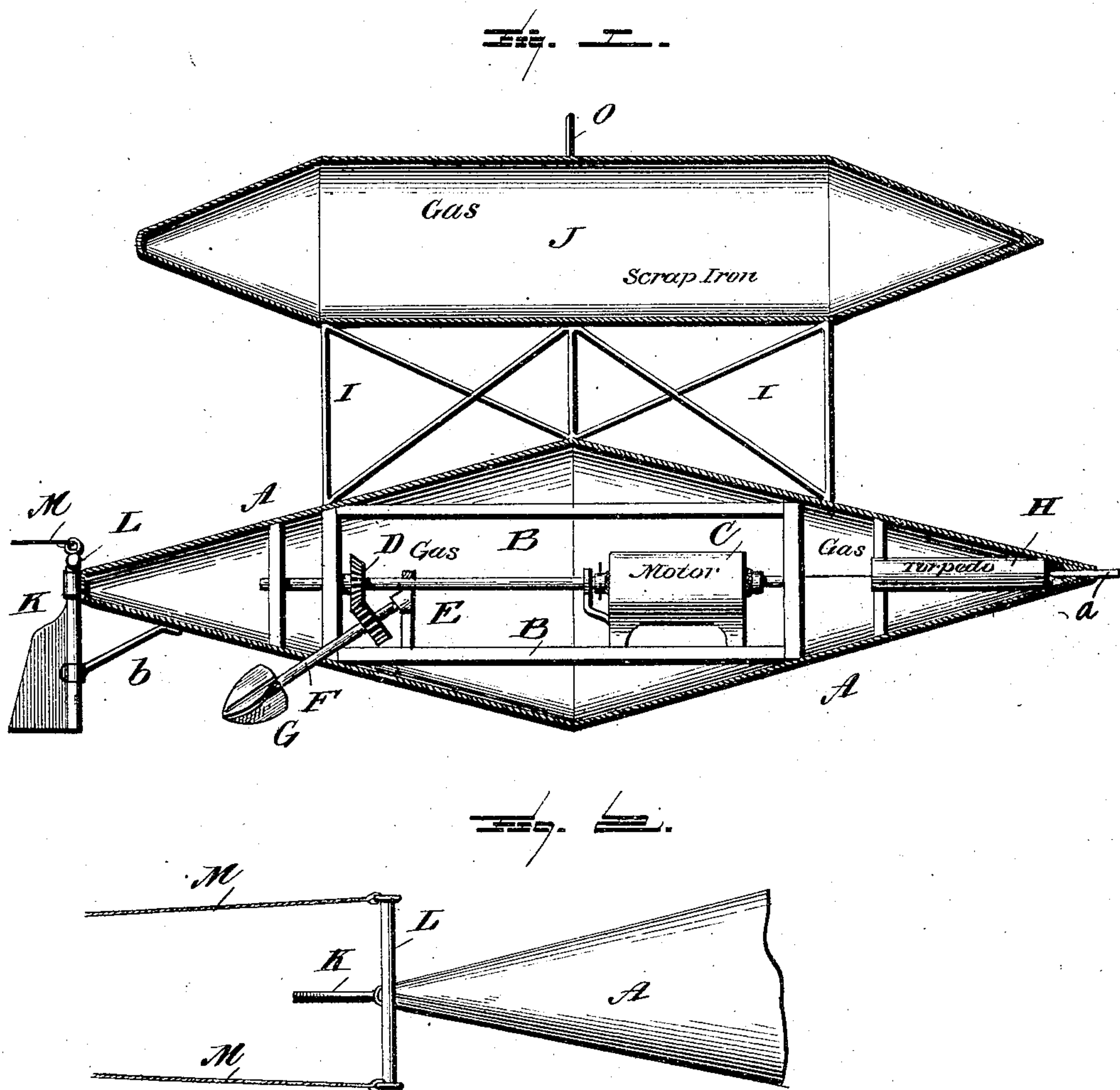


(No Model.)

J. AMBROSE.  
TORPEDO BOAT.

No. 464,909.

Patented Dec. 8, 1891.



Witnesses

L. C. Hill  
E. A. Bond.

Inventor

John Ambrose,  
per Chas. H. Fowler  
Attorney



# UNITED STATES PATENT OFFICE.

JOHN AMBROSE, OF YOUNGSTOWN, OHIO.

## TORPEDO-BOAT.

SPECIFICATION forming part of Letters Patent No. 464,909, dated December 8, 1891.

Application filed April 25, 1891. Serial No. 390,431. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN AMBROSE, a citizen of the United States, residing at Youngstown, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Torpedo-Boats; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in torpedo-boats; and it has for its objects, among others, to provide an improved device of this character designed to be self-propelling and to be propelled through the water without any occupant.

I provide a gas-chamber which is preferably filled with scrap-iron and supported on the torpedo-boat proper, the latter carrying the motor and propelling means, and a torpedo or torpedoes which explode when coming in contact with an object, thus blowing up the object and the boat itself. Suitable means are provided for the guiding of the boat from the shore or other place from which it is propelled.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a vertical longitudinal section through my improved device. Fig. 2 is a top plan of a portion of the rear end, showing the steering mechanism.

Like letters of reference indicate like parts in both views where they appear.

Referring now to the details of the drawings by letter, A designates the shell of the device, which is preferably of the form shown, although this may be varied, if desired. Within this shell is arranged a suitable frame-work B, in which is supported a motor C of any known or approved form, the shaft of which is journaled in the frame-work, as shown in Fig. 1, and carries a bevel-pinion D, which meshes with a bevel-pinion E on the vertical shaft F, which extends through the bottom of

the shell to the rear of the center, and carries at its lower end a propeller G of any approved form of construction. At its forward end this shell carries a dynamite or other cartridge H, one or more, of the desired capacity, the same being designed to be exploded when coming in contact with the desired object by the movement of the firing-plug a, which protrudes slightly through the forward end of the shell, as shown in Fig. 1. This shell is designed to be filled with some explosive, preferably natural gas, which is one of the greatest explosives, the outside being covered with sheet metal and hermetically sealed, so as to render it water and air tight. Supported upon this shell in any suitable manner, as by the braced work or support I, is the upper gas-chamber J, which is designed to be filled with natural gas and scrap-iron, which may be cut to any desired size and weight. Any suitable connection may be provided between the chambers J and A, or the chamber J may be formed of a material of such a nature that the force of the explosion of the chamber A will shatter the chamber J and explode the gas therein.

To provide for the ready steering of the device, I arrange a rudder K at the rear end of the shell A, and to the stem of the rudder attach a cross-bar L, to the ends of which are attached the cords M, which are designed to be unwound from suitable reels (not shown) on the shore or wherever the device is shot from, so that the device may be guided toward the object at which it is aimed. The rubberstem is suitably braced by a brace-bar b.

Upon the top of the upper gas-chamber I sometimes arrange a holder, as O, for a spirit-lamp. (Not shown.)

The operation will be readily understood. The device being charged, it is shot from the shore or other place, and the moment it strikes a vessel or other desired object the torpedo is exploded, which explodes the gas within the lower chamber or shell, and this at once explodes the gas in the upper chamber, and the moment the gas comes in contact with the water it is the greatest agent of destruction, and being charged both above and below it will destroy anything in the vicinity thereof, the scrap-iron being hurled with great force and tearing things to atoms.



The size and shape and capacity of the chambers may be varied, as well as the size of the bombs or cartridges.

What I claim as new is—

- 5 1. A torpedo-boat consisting of a shell filled with gas and hermetically sealed, a motor within the shell, a propeller actuated by the motor, a torpedo at the forward end of the shell, and a supplemental chamber supported  
10 above the shell and filled with gas and scrap-iron, substantially as specified.
2. A torpedo-boat consisting of a shell filled with natural gas and hermetically sealed and

provided with steering means, a motor within the shell, a propeller actuated by the motor, 15 a torpedo at the forward end of the shell, and a gas-chamber supported above the shell and filled with gas and scrap-iron, substantially as specified.

In testimony that I claim the above I have 20 hereunto subscribed my name in the presence of two witnesses.

JOHN AMBROSE.

Witnesses:

E. GUTHMAN,  
JAMES KENNEDY.