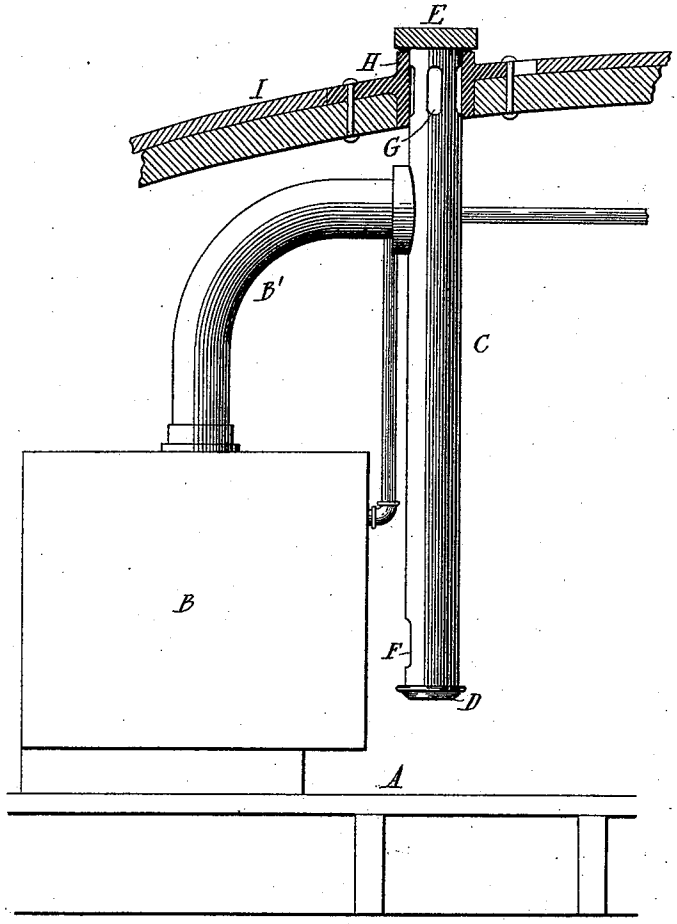
(No Model.)

G. C. BAKER, Dec'd.

M. R. BAKER, Administratrix.

SUBMARINE TORPEDO BOAT.

No. 525,178. Patented Aug. 28, 1894.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE C. BAKER, OF CHICAGO, ILLINOIS; MARY R. BAKER ADMINISTRATRIX OF SAID GEORGE C. BAKER, DECEASED.

SUBMARINE TORPEDO-BOAT.

SPECIFICATION forming part of Letters Patent No. 525,178, dated August 28, 1894.

Original application filed March 14, 1893, Serial No. 465,983. Divided and this application filed September 25, 1893. Renewed July 10, 1894. Serial No. 517,165. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. BAKER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Submarine Torpedo-Boats; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which forms a part of this specification.

My invention relates to submarine boats which are capable of propulsion upon the surface of the water, and also capable of motion downwardly through the water, or parallel with the surface or of an upward motion, and is a divisional application of the application filed by me on the 14th of March, 1893, Serial No. 465,983.

The feature of novelty in my present invention is the combination with a furnace and its boiler whereby steam is generated for driving an engine, an adjustable smoke-stack the cover of which is adapted to seat itself and form a water tight joint when the stack is lowered, and at the same time to muffle or close the smoke pipe to prevent the escape of smoke in the boat; and when the vessel is at anchor upon the surface or traveling thereon, the stack is raised so that it registers with the smoke pipe and delivers into the atmosphere.

In the accompanying drawing I have shown enough of a submarine boat, with the boiler furnace and the feature of the adjustable smoke-stack, to illustrate my invention.

Upon the deck A is placed the boiler B, the smoke pipe B′ from the furnace of which delivers into the vertically adjustable or slidable smoke-stack C. The ends of this stack are closed respectively by the cap D and cover E, and its side wall adjacent to the boiler is perforated at F near its bottom to register with the opening in the smoke pipe from the furnace when the stack is elevated, while a perforation or perforations G in the upper end of this stack permits the discharge of the smoke into the atmosphere. The cover E extends outward a slight distance to form a flange which is adapted to seat upon the flange H of the opening in the top I of the boat in which the stack slides. When the stack is lowered its imperforate portion seats the end of the smoke pipe from the furnace, thus preventing the escape of the smoke into the boat, while the upper end seats itself thus preventing the entrance of water to the interior of the boat through the opening in its shell.

The feature of the adjustable smoke-stack renders the boat susceptible of propulsion by steam when the boat is on the surface, and of propulsion by another suitable motive power when the boat is submerged, as for instance, electricity. I do not intend to limit my invention to the precise arrangement and details of construction except as indicated by the claims.

I claim—

1. In a submarine boat and in combination with the smoke outlet of the furnace, a smoke-stack slidable vertically through the hull and having a perforation in its lower portion which registers with the said smoke outlet when the stack is raised, the surface of said stack closing said smoke outlet when the stack is lowered, substantially as set forth.

2. In a submarine boat, and in combination with the smoke outlet of the furnace and with an opening in the shell provided with a seat, a vertically slidable smoke-stack movable within said opening and having a cover for engagement with the seat when in a lowered position, openings in the stack adjacent to the cover, and a perforation in the lower portion of the stack adapted to register with the smoke outlet when the stack is raised, substantially as and for the purpose hereinbefore described.

3. In a submarine boat, a furnace for generating steam therein, said furnace having a smoke pipe leading therefrom and terminat-

ing within the boat, and a smoke-stack adapted to slide through an aperture in the shell of the boat and having its ends closed and its side wall perforated near its respective ends, the lower perforation adapted to register with the delivery end of the smoke pipe when in its raised position, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE C. BAKER.

Witnesses:
WILL T. NORTON,
ARTHUR BROWNING.