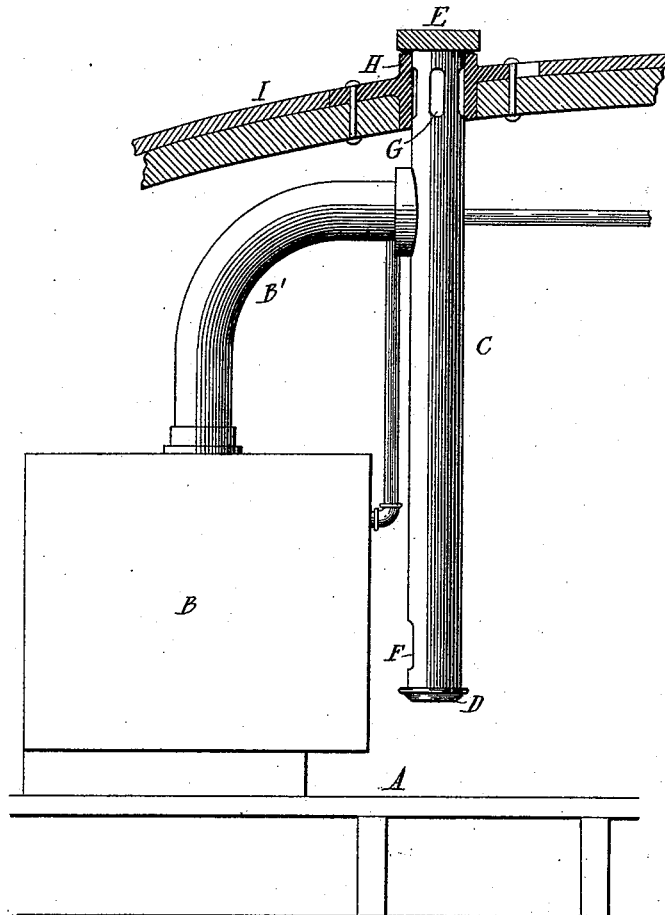


(No Model.)

G. C. BAKER, Dec'd.
M. R. BAKER, Administratrix.
SUBMARINE TORPEDO BOAT.

No. 525,178.

Patented Aug. 28, 1894.



Witnesses

Wm. S. Norton
A. H. Wood

Inventor

George C. Baker

By M. S. Hulley
his Attorney

UNITED STATES PATENT OFFICE.

GEORGE C. BAKER, OF CHICAGO, ILLINOIS; MARY R. BAKER ADMINIS-
TRATRIX OF SAID GEORGE C. BAKER, DECEASED.

SUBMARINE TORPEDO-BOAT.

SPECIFICATION forming part of Letters Patent No. 525,178, dated August 23, 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. 517,155. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. BAKER, a
citizen of the United States, residing at Chi-
cago, in the county of Cook and State of Illi-
nois, 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 accompany-
ing 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 sur-
face 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 in-
vention is the combination with a furnace and
its boiler whereby steam is generated for driv-
ing 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 atmos-
phere.

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 de-
livers into the vertically adjustable or slid-
able 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 ex-
tends 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 pre-
venting the escape of the smoke into the boat,
while the upper end seats itself thus prevent-
ing 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 in-
vention to the precise arrangement and de-
tails 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 clos-
ing said smoke outlet when the stack is low-
ered, 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 por-
tion of the stack adapted to register with the
smoke outlet when the stack is raised, sub-
stantially as and for the purpose hereinbefore
described.

3. In a submarine boat, a furnace for gen-
erating 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,
5 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.