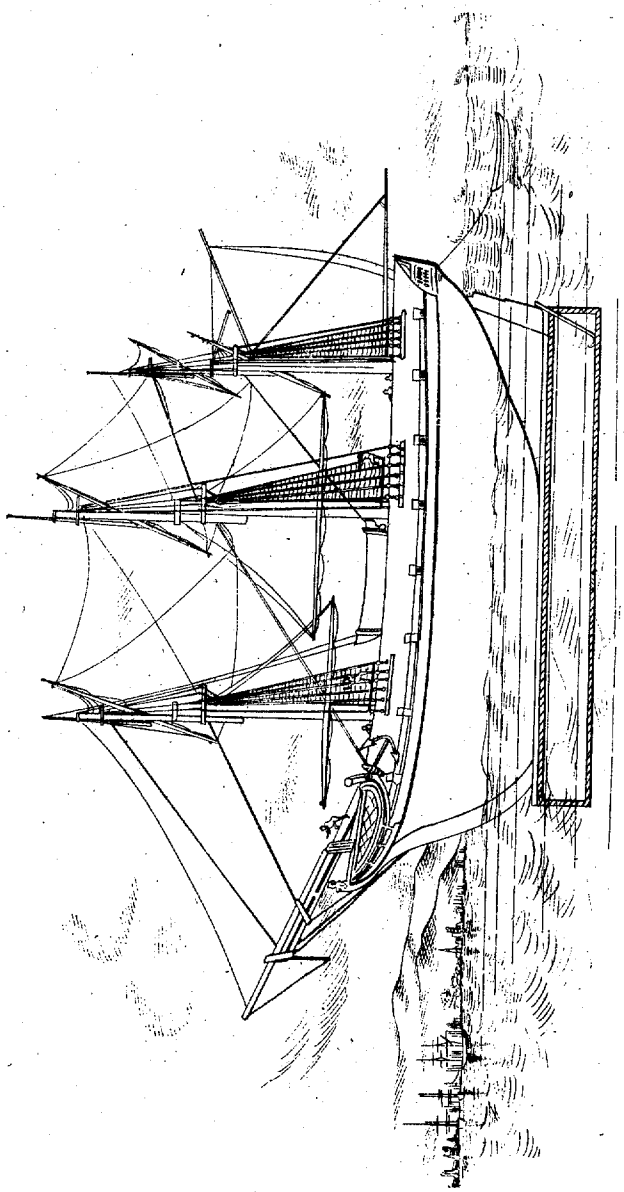
2 Sheets. Sheet 1.

9268X

Cambell & Withington,
Camel & Floating Dock.

Patented Nov 26, 1835.



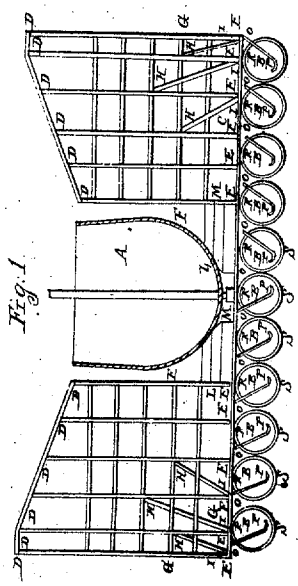


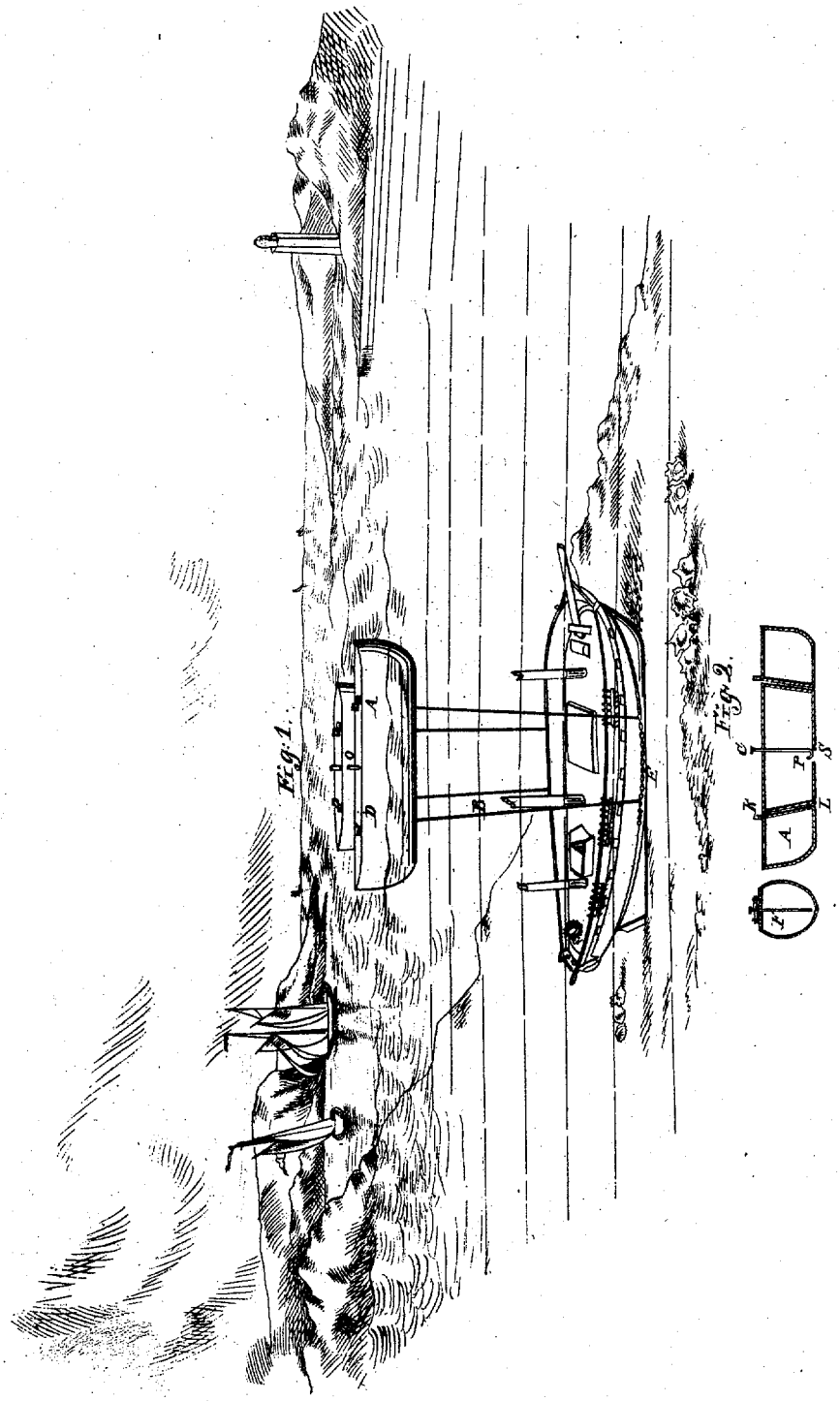
Fig. 1

2 Sheets. Sheet 2.

9268X

Cambell & Withington,
Camel & Floating Dock.

Patented Nov. 26, 1835.



9268 Nov 25, 1835

John A Campbell and Nathaniel H Whittemore of Boston Mass

Letters Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said John A Campbell and Nathaniel H Whittemore of the said City of Boston in the improvement in the Steering Apparatus for Navigating Vessels

To all persons to whom these presents shall come, Be it known that we the said John A Campbell and Nathaniel H Whittemore both of the City of Boston in the County of Suffolk and Commonwealth of Massachusetts have invented a new and useful improvement in a Marine Steering Apparatus and that the following is a full and exact description thereof. The objects to be attained by said improvement are to give to the Helmsman (or Steersman) of Vessels that have been adopted, the greatest power over the Rudder, and also to have the least liability out of the rudder from unshipping. These objects are effected by combining Mechanism Gearing as hereinafter fully set forth, and pointed out in the claim for the same, by a process peculiar from the boats as made and by placing the whole within the Vessel in such a manner relatively to the centre of motion of the Rudder that the weight of the same, will not be drawn into the following manner.

The Steering Mechanism annexed at plate 1 Fig 1. represents a section of the Vessel with a Rudder boat A attached to it, to be made of wood, Indian Rubber cloth, or any other suitable substance. On the Boat is represented the steering as attached to the vessel but has can be used attached to each side of the vessel and even more if necessary. Fig 2 Represents another boat of the same kind. These Boats must be built for the purpose of sufficient strength and lightness to be carried in safety under the water. On a windlass K L on a well running through the Boat in which B a cable is placed through which it has been wound round the Gunwale Shaft and extended out

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a "Shrouded Chain C. The cable is Shown made fast to the crowd of
D. and from right
D. Shews one valve V. is opened and the water let into the
Boats at M. which is an open hole in the bottome of the boat.
The Boats can Shew be Shown down to the depth required. G.
is a tube which stands a little above the top of the boat, and
passes down to the bottom where it turns up with a valve
on the end opening inboard, with a valve at the upper end
C. and a force pump or Bellows attached to it. Then shut
the valve C and start the pump and the air will rise from
the end of the tube F and fill the Boats with air. They
will then raise the amount of weight of the water displaced.
Another tube can be secured at C Shewn necessary to long
on the tube. Plate 2. represents the mode of raising ships out
of the water for repairing. 1 represents a Ship H.M.S. &c
a number of round casks or Boats of such dimensions as
may be required. Shewn represented are supposed to be five
feet in diameter and one hundred feet long C.C. is a platform
over these boats. Q.Q. Q.Q. &c are upright posts with lu
nauts into the horizontal timber where can be moved if re
quired for a larger or smaller vessel. F.F. F.F. is a staging to
work upon. H.F. H.F. &c are Braces L.M. L.M. are cra
-ble blocks. A.P. A.P. &c are ropes as in Plate 1 passing ro
the casks or Boats and additional tube may be attached to
them when required as described in plate 1. with a valve, an
force pump at the upper end of the tube. In order to
sink the casks or Boats. the air valves V.V.K &c should
be opened and the boats, and platform will sink low
enough to allow of their being hooked under the vessel. Then
by working the pumps the air will force the water out o
of. and the ships will be heeled out of water as represen
ted in plate 2. Fig 1. We claim as our invention and
as not having been previously used or known, the machine
or apparatus herein described, as combined together for

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the presence before mentioned. In testimony thereof the above is a true description of our said invention We have hereunto set our Hands & Seals the twenty second day of June in the Eight hundred and thirty four

Witness
H.G. Worrell
H.C. Campbell

J.R. Campbell
J.W. Willington

(Withdrawn) (Drawing.)