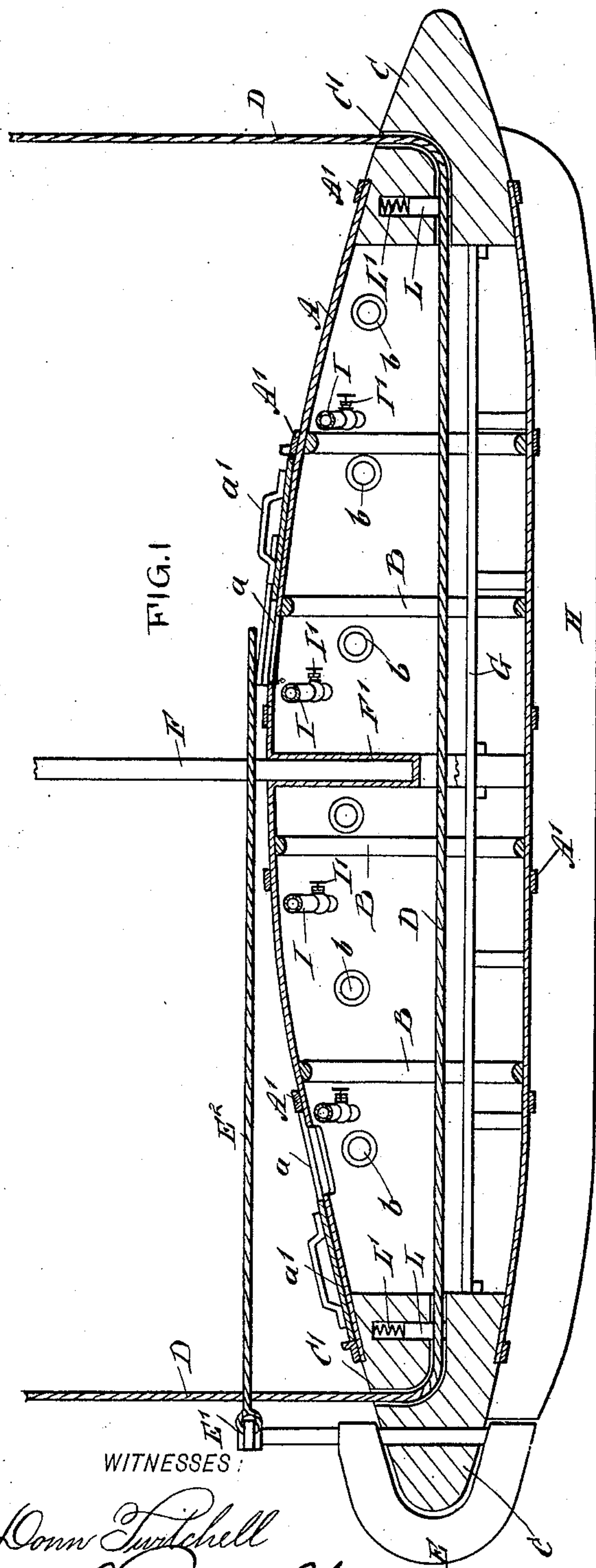


(No Model.)

J. MITCHELL, Sr.
LIFE BOAT.

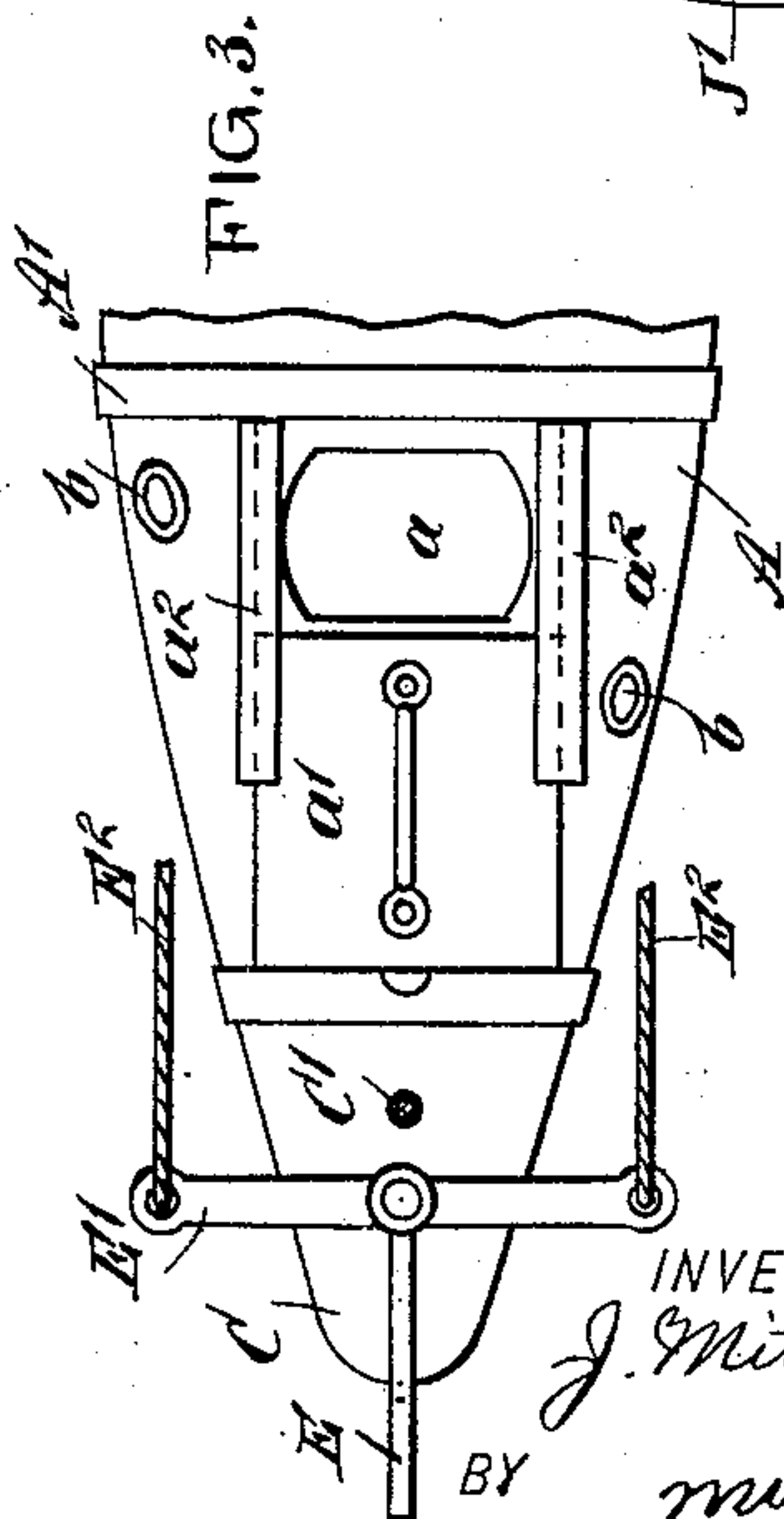
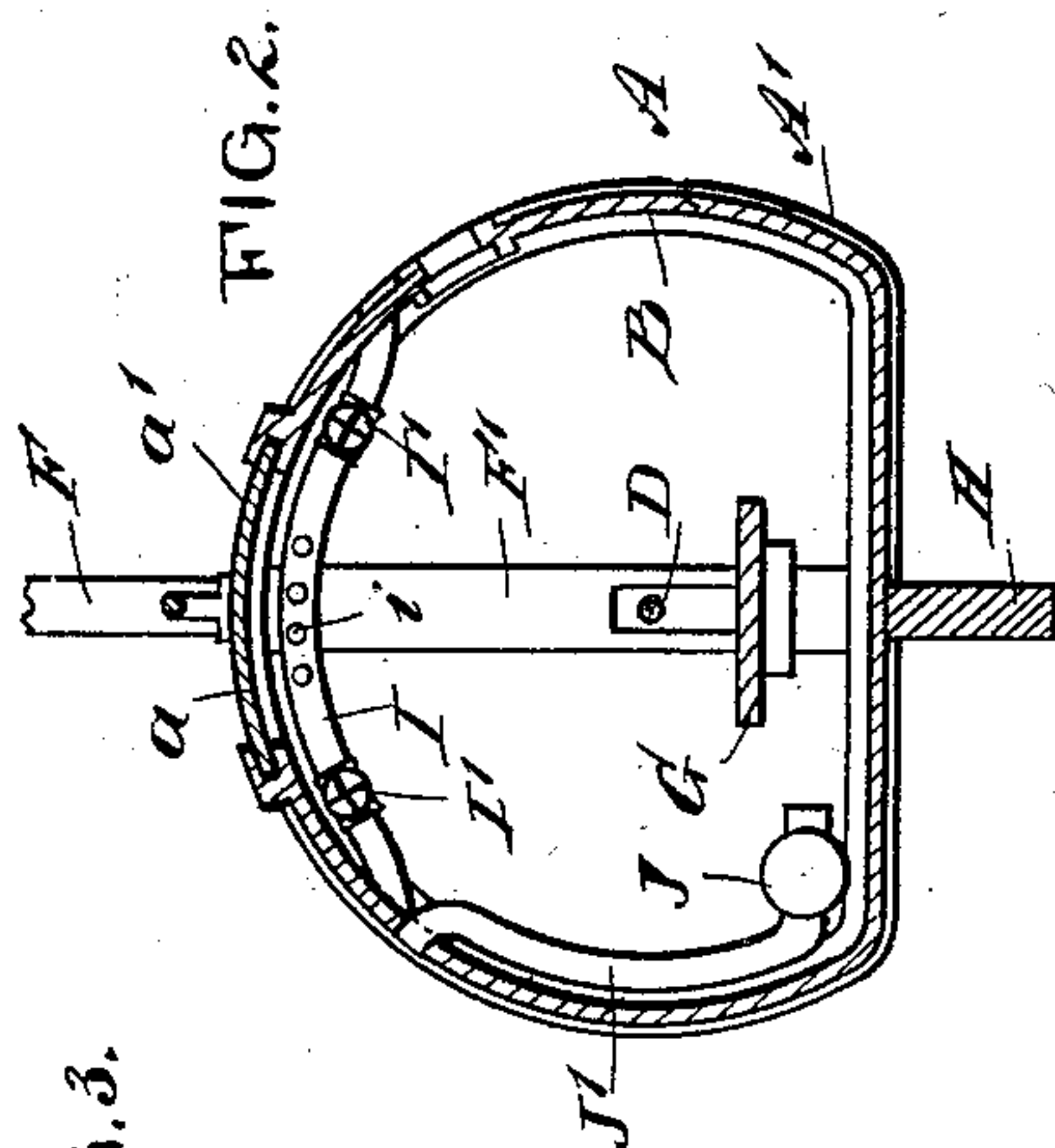
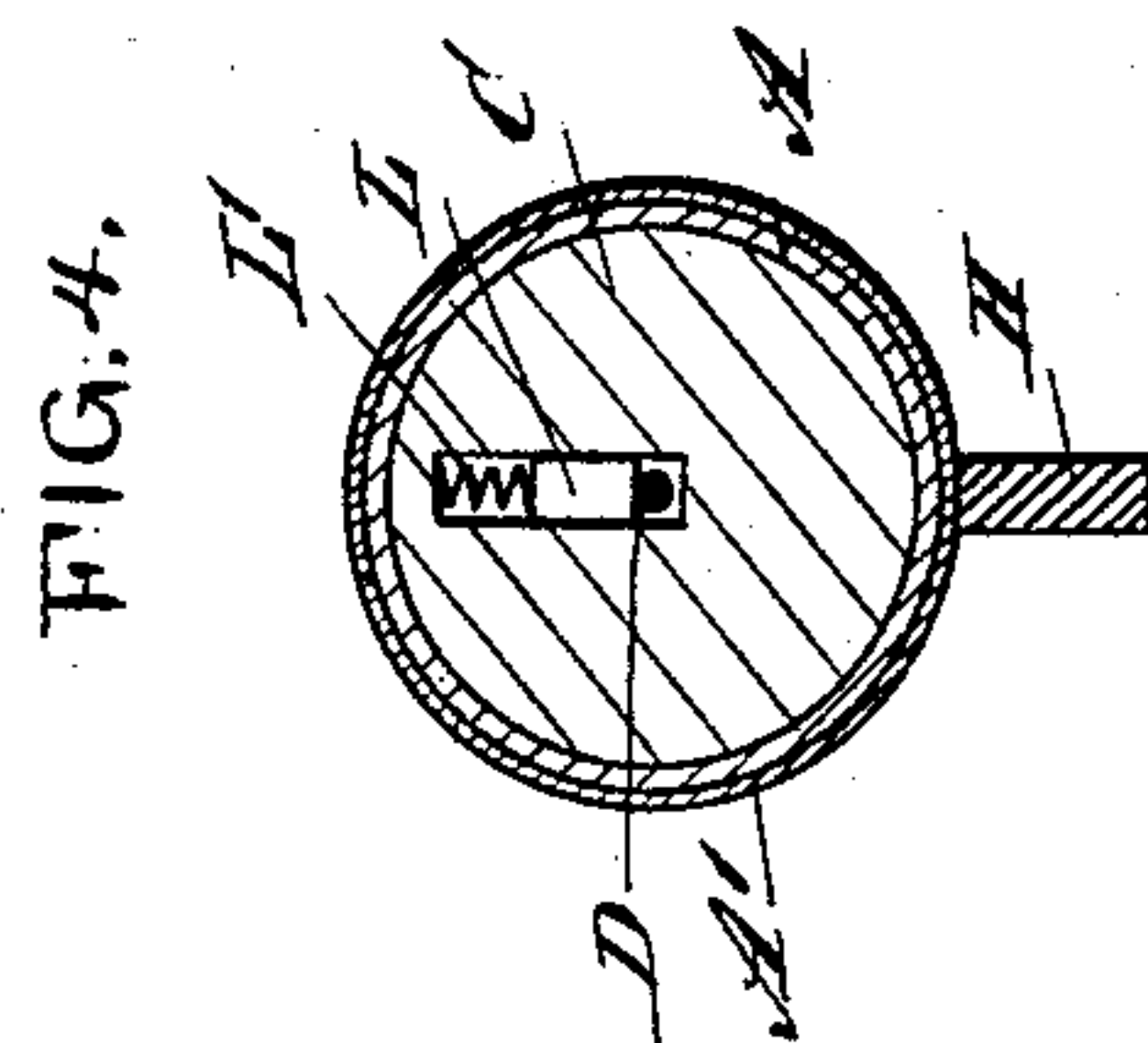
No. 603,532.

Patented May 3. 1898.



WITNESSES:

Donn Mitchell
H. L. Reynolds.



INVENTOR

J. Mitchell, Sr.

BY

[Signature]

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES MITCHELL, SR., OF ARROW RIVER, CANADA.

LIFE-BOAT.

SPECIFICATION forming part of Letters Patent No. 603,532, dated May 3, 1898.

Application filed April 24, 1897. Renewed April 2, 1898. Serial No. 676,256. (No model.)

To all whom it may concern:

Be it known that I, JAMES MITCHELL, Sr., of Arrow River, in the Province of Manitoba and Dominion of Canada, have invented a new and Improved Life-Boat, of which the following is a full, clear, and exact description.

My invention relates to an improvement in life-boats, said boat being shaped as an inclosed figure having pointed ends, the cross-section thereof being of a circular form, with the lower portion flattened.

The boat is provided with suitable hatchways for the entrance and exit of passengers and with a rudder and steering-ropes, which may be operated from the hatchways or from within the boat. It is also provided with a suspending-rope, which enters the boat at either end and extends longitudinally of the boat within the same, by means of which rope the boat may be dropped from its davits by cutting the rope within the boat.

The invention also consists of certain details of improvement which will be more particularly pointed out in the following specification and claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of my boat. Fig. 2 is a cross-sectional elevation thereof. Fig. 3 is a top plan view of the stern portion of the boat, and Fig. 4 is a cross-section taken through the cavity which contains the slide for closing the rope-guideway at the end of the boat.

My boat may be constructed of wood or metal. The construction shown in the drawings contemplates using wooden staves, which form the body of the boat. These staves are placed side by side, similar to the staves of a barrel, to form the main body A. Outside of these are placed hoops A', which act, similar to the hoops of a barrel, to retain the staves in position.

The boat is strengthened by internal ribs B, which are formed of stout wood or metal and which increase the strength of the body.

At each end of the boat is a large block C, which is of a conical shape and has a passage C' extending through the same, the two ends of the passage being at right angles to each

other and forming a guideway for the suspending-rope D.

The boat tapers from the central portion toward each end and is provided with a rudder E at one end, which is connected to a tiller E', and this in turn with ropes E², which extend forward to a hatchway through convenient openings to the center of the boat, and by means of these ropes the boat may be readily steered.

The boat is also provided with a mast F, stepped in a central socket F'. It is also provided with hatchways a, one at each end of the boat. These are covered by hatches a', which slide in guides a².

The boat is provided with a bench G, which extends horizontally of the boat in its center and upon which passengers may sit with their backs to each other. The boat is provided with a heavy keel H, which will give the boat stability and right the boat should it by any accident be overturned. It is also provided with port-holes b, which are glazed in a manner similar to the port-holes of a steamer.

A number of ventilating-pipes I, which extend across the upper interior portion of the boat, are connected at each end with the outside air. Just within the boat they are provided with valves I', which enable the pipes to be closed and prevent the entrance of water, whenever the same is necessary. These pipes are provided with perforations i between the said valves, through which the air enters the interior of the boat. The boat may also be provided with a pump J, connected by the discharge-pipe J' with the exterior, by which any water which may enter the boat may be forced outside.

Within the body of the conical blocks C at each end of the boat and intersecting the rope-guideway C' is a recess which contains a sliding block L. This block is held down upon the rope by a spring L'. When the rope is removed from the guideway, the block L will be forced down, so as to close the passage and prevent entrance of water through said guideway.

The rope D is the rope from which the boat will be suspended. In case it is necessary to launch the boat the boat will be filled while suspended from its davits. In case it is inconvenient or impossible to launch the

boat in the usual way by letting out the rope D the boat may be launched by cutting the rope D from within the boat. When this is done, the boat will drop, the rope being pulled out through the guideways at each end.

From the shape and method of construction of the boat it will be very strong, and a drop, even of considerable distance, will not injure the boat. From its construction it will also be impossible to overturn the boat or put it in such a position that it will not immediately right itself.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A boat, comprising a hollow inclosed figure, having a rope-guiding passage through each end thereof, and a slide adapted to close said passage when the rope is removed therefrom, substantially as described.

2. A boat, comprising a hollow inclosed figure having pointed ends, and a rope-guiding passage through each end, and a slide having a spring acting thereon and adapted to close said passage when the rope is removed therefrom, substantially as described.

3. A boat, comprising a hollow inclosed figure having pointed ends, hatchways upon the upper side of the boat, a mast-socket in the boat, a rudder pivoted at one end of the boat, steering-ropes connected to the rudder, and

a rope-guideway at each end of the boat communicating with the interior and adapted to receive a suspending-rope, and means for automatically closing said rope-guideways upon the removal of the rope, substantially as described.

4. A boat, comprising a hollow inclosed figure, provided with hatchways, lighting port-holes, ventilator-pipes extending to the outside, and rope-guideways at each end extending from within the boat to the outside, and adapted to receive a common suspending-rope which passes lengthwise within the boat, and means for automatically closing said rope-guideways upon the removal of the rope, substantially as described.

5. A boat, comprising a hollow inclosed figure, provided with hatchways, lighting port-holes, ventilator-pipes extending to the outside, and rope-guideways at each end extending from within the boat to the outside, and adapted to receive a common suspending-rope which passes lengthwise within the boat, and a spring-held slide in said guideways adapted to close the guideway when the rope is removed, substantially as described.

JAMES MITCHELL, SR.

Witnesses:

HERBERT HANKS GOULTER,
ALFRED DAVIS SOLLIFF.