

J. M. Cayce, Life Boat.

Nº 67,846.

Patented Aug. 20, 1867.

Fig: 1.

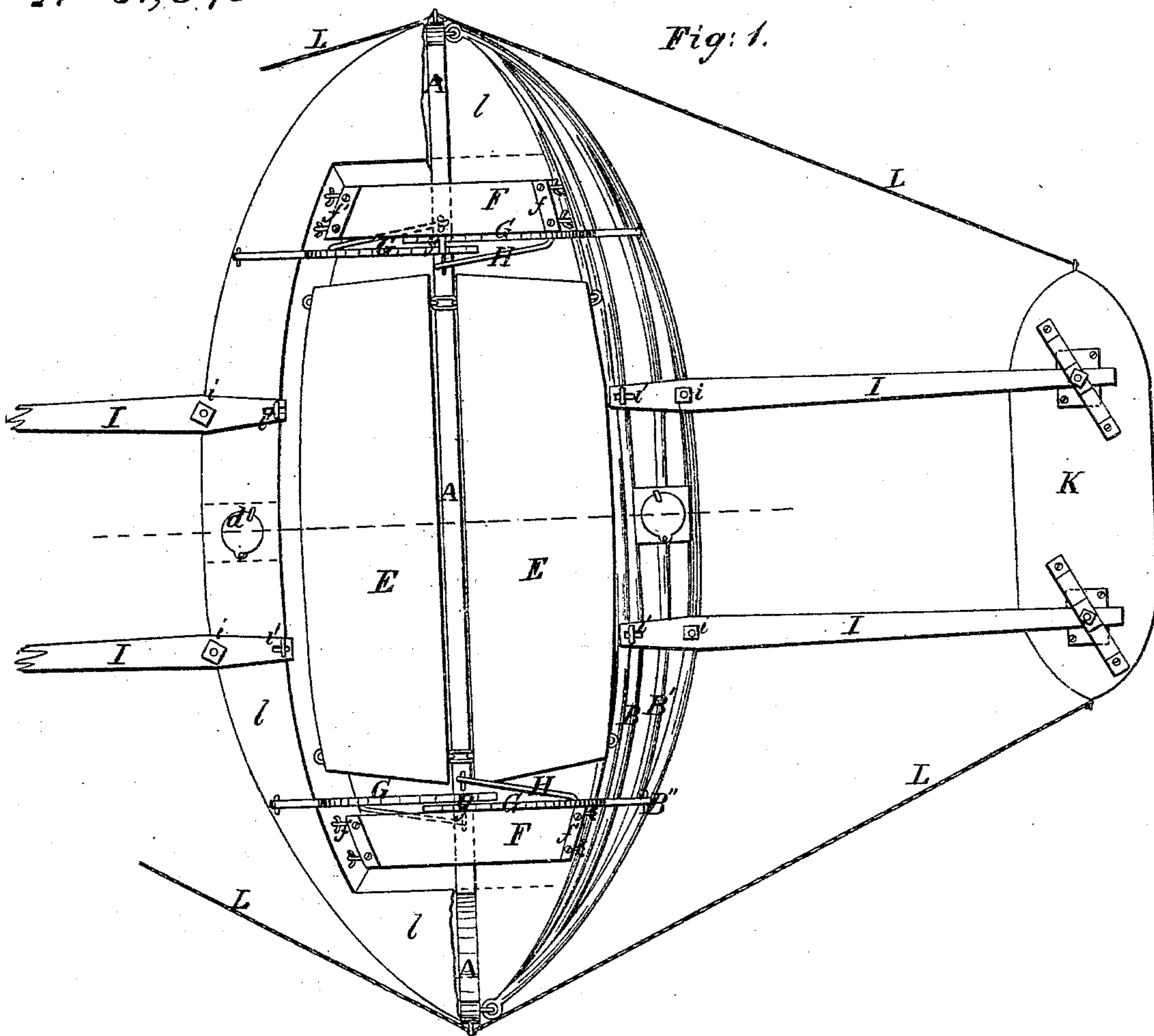
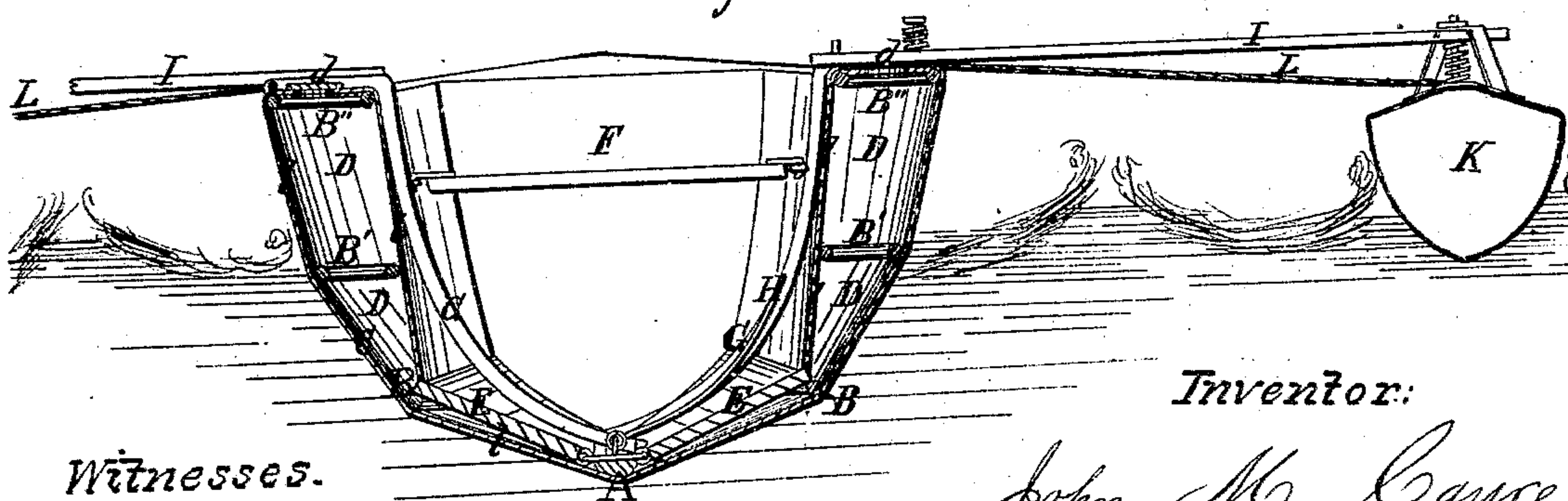


Fig: 2.



Witnesses.

*Charles A. Pettit
John B. Kemow*

Inventor:

*John M. Cayce
By Minn & Co.
Attorneys.*

United States Patent Office.

JOHN M. CAYCE, OF FRANKLIN, TENNESSEE.

Letters Patent No. 67,846, dated August 20, 1867.

IMPROVED SPORTING AND LIFE-BOAT.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN M. CAYCE, of Franklin, in the county of Williamson, and State of Tennessee, have invented a new and improved Portable Sporting and Life-Boat; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a top view of my invention.

Figure 2 is a cross-section of the same.

Similar letters of reference indicate corresponding parts in the two figures.

In fig. 1 the frame of the boat is shown uncovered on the right side of the drawing; on the left the frame is covered.

This boat is a light frame, covered with water-tight cloth, and capable of folding together. It is provided with horizontal arms, having floats at their extremities, which can be thrown out so as to make the width of the whole floating apparatus equal to its length, and render capsizing nearly impossible.

In order that others skilled in the art to which my invention appertains may be enabled to make and use the same, I will proceed to describe it in detail.

In the drawings, A is the keel, which at its extremities has the different pieces of the frame B B¹ B² hinged to it, so as to be capable of being shut together. Next to the keel the single rod B runs the whole length of the boat. Above that is the double rod B', similar to rod B, except in consisting of two parts. Above that again is the double rod B'', similar to B', except that its two parts diverge more from each other in their centre.

The cover C may be of gummed or oiled cloth, or any other suitable material. It extends from the keel A around the outside of rods B B' B'', then over rod B'', and down the inside of rods B'' and B' to rod B, forming air-chambers D D on each side of the boat above the rods B. Between the rod B and the keel A there is no air-chamber. The cloth may then be of two thicknesses or one, as may be preferred by the builder. An air-chamber may also be provided at each end of the boat.

A boat thus formed may be expanded or folded together at pleasure. When it is folded, and you desire to expand it, the air must of course be let into the air-chambers D D, and valves *d d* are provided for that purpose. When the chambers are full of air the valves are closed. If, afterwards, you desire to fold up the boat for transportation, the valves must again be opened, to permit the escape of the air confined within.

A floor, composed of two pieces E E, running longitudinally with the boat, is hinged to the keelson. The two parts of this floor shut together when the boat is folded up.

Thwarts F F are attached to the boat at suitable points by hinges *f* on one side, and a hook and eye, *f'*, or other suitable fastening, is provided to support them at their other extremity.

Braces G G are attached by hinge joints to the outer upper edge of the boat's sides, and extend down on the inside of the boat's hold and a short distance across the keelson. At suitable points in these braces are holes, into which rods H H, attached to the keelson, hook, and thus hold the braces G G firmly in position. The lower extremities of the braces G G are confined, when the boat is expanded, by means of small T-shaped keys *g g*. This completes the description of the body of my improved boat.

Attached to this hull by horizontal arms I I are two floats K K, designed to prevent the boat from capsizing. I do not intend to confine myself to any particular form of these floats, or material of which they may be constructed, but wish to be at liberty to use any form and any material that may be found to answer my purpose best. These floats are suspended from the extremities of the arms I I, which pass under and are pivoted to arched strips attached to the upper surface of the floats. The arms I I are likewise pivoted, at the edge of the boat, upon the bolts *i i*. When expanded they are confined in the proper position by means of T-shaped keys *i'*, attached to the boat, and working in slots in the ends of the arms I I.

The arms I I swing horizontally on the pivots *i i*. By the means described the floats may be fastened in the position shown in the drawings, or, by removing the keys *i' i'* from the slots in which they work, the floats, still attached to the boat by the arms I I, may be swung round to either end of the boat, so as to lie close alongside of the latter.

The bolts *i i* and keys *i' i'* may be made of any size and strength required, as also may the arms I I. In

order to prevent every little rise or fall of either float from straining upon the arms I I, the latter may be attached to the floats by spiral springs, which will yield to and neutralize any slight motion of the floats.

The floats K K may be made of sufficient capacity to support any load that could be placed in the boat's hold, even if the latter should become injured and sink. They being firmly attached to the boat, it would thus become impossible for the latter to sink further than a few inches below the surface of the water.

Suitable cords L L should be provided, for the purpose of extending and confining the floats K. By this means the arms I I will be relieved of much of the strain that would otherwise come upon them.

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

1. The braces G G, in combination with the frame B' B', rods H, keys *g g*, and keel A, substantially as and for the purpose described.

2. The floats K K, in combination with the arms I I, attached to them and to the boat, substantially as described.

To the above specification of my improvement I have signed my hand this 3d day of June, 1867.

J. M. CAYCE.

Witnesses:

CHARLES A. PETTIT,

SOLON C. KEMON,