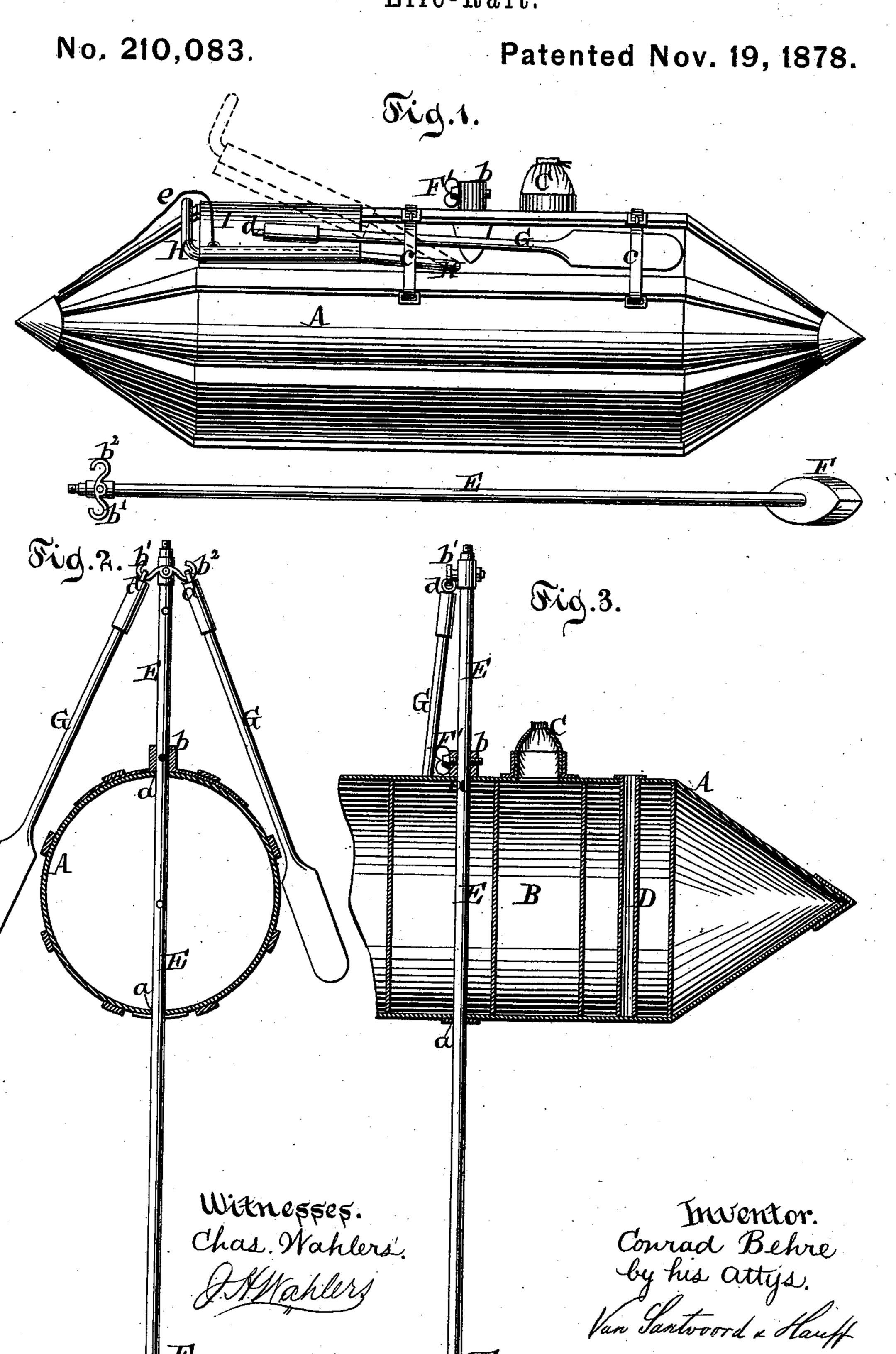
C. BEHRE. Life-Raft.



UNITED STATES PATENT OFFICE.

CONRAD BEHRE, OF HOPEVILLE, NEW JERSEY.

IMPROVEMENT IN LIFE-RAFTS.

. Specification forming part of Letters Patent No. 210,083, dated November 19, 1878; application filed June 27, 1878.

To all whom it may concern:

Be it known that I, CONRAD BEHRE, of Hopeville, Mercer county, New Jersey, have invented anew and useful Improvement in Life-Rafts, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a side view of my raft, showing the positions of the parts when the raft is not in use. Fig. 2 is a cross-section thereof when the parts are in a position for use. Fig. 3 is a longitudinal central section of the forward part of the raft.

Similar letters indicate corresponding parts. The chief aim of my invention is to provide a life-raft which can be conveniently carried about when not in use, the same having also various other advantages, as hereinafter ex-

plained. It consists in a cylindrical air-tight body, which is pointed at one or both ends, and provided with a central vertical rod having a weight at its lower end, so that when the whole is placed in the water the cylindrical body can be straddled by a person while its equilibrium is preserved by the action of the weight. make the weighted rod detachable from the cylindrical body to permit of bringing the whole in a small compass and facilitate transportation, and also make the rod adjustable in the direction of its length, so that the weight can be raised or lowered at will to suit the condition of the water or the position of the person occupying the raft, it being desirable to bring the weight in a lower position when a person stands upright. The weighted rod projects above and below the cylindrical body of the raft, and on its upper part or end it is provided with hooks or other means for connecting thereto a pair of oars, the latter being provided with means to engage with these hooks, so that when the oars are put in place they are brought in a convenient position to be grasped by a person straddling the body of the raft. To a suitable part of the cylindrical body of the raft is hinged a covered frame, which, in its normal position, forms a seat, and when brought to an inclined position, forms a head-rest, the said frame being provided with a rope or chain for connecting with the upper

part of the vertical rod when it is desired to retain the frame in its elevated position.

In the drawing, the letter A designates the body of my raft, which has a cylindrical shape, and is pointed at both ends. I hermetically seal this body A, so as to render the same airtight, and I prefer to construct the same of sheet metal, and to divide the same into a series of compartments. One of these compartments (marked B) forms a provision-chamber, and access is had through an opening covered by a water-proof dress, C. Near one end of the cylindrical body A is formed a well, D, (see Fig. 3,) for the reception of a mast, which, when not in use, is fastened to the side of the body A by suitable straps.

The letter E designates the vertical rod of my raft, having a weight, F, at one end. This rod is made independent of the body A, but is fitted in holes a a formed opposite to each other in the central part thereof, through which holes the rod is passed when it is desired to use the raft. To the hole a, which is in that part of the body A constituting the top of the raft, is secured a collar, b, which is provided with a set-screw, F', by which the rod is held in the position to which it may be adjusted.

The rod E is arranged to project above the cylindrical body A, as shown, and after the same has been adjusted in the desired position I secure to its upper end hooks b^1 b^2 , and connect thereto the looped ends d of a pair of oars, G G. When the raft is packed up these oars G G may be fastened to the side of the cylindrical body A by straps c c, as shown in Fig. 1.

The letter H designates a yoke-shaped frame, which is hinged to the cylindrical body A, and partially covered by a piece of canvas, I, or other flexible material. To this frame are connected the two ends of a rope or chain, e.

It will be seen that the cylindrical body A can be straddled or stood upon by the person desiring to use my raft, and it is prevented from upsetting by the weighted rod E, while the oars G G are in a convenient position to be used in propelling the raft.

·When the covered frame H is allowed to remain in its normal position—that is to say, when the same is allowed to rest on the cylin-

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drical body A—it forms a seat, while, when it is slightly raised, so as to bring the same in an inclined position, as shown in dotted outline in Fig. 1, it can be used as a head-rest. When the frame H is used as last stated, the straps c c can be utilized for holding one's legs, and thus a very comfortable position can be taken on my raft.

For the purpose of retaining the frame H in its raised position, I connect the cord or chain e to the upper part of the weighted rod E in

any suitable manner.

What I claim as new, and desire to secure

by Letters Patent, is—

1. In a life-boat, the combination, with a cylindrical air-tight body, of a vertically-adjustable rod, passing centrally through the same and projecting therefrom at both ends, the lower end being provided with a weight, and the upper end constructed to support oars for propelling the boat, substantially as described.

2. In a life-raft, the combination, with a cy-

lindrical air-tight body, pointed at one or both ends, of a rod, which passes centrally through said body so as to project therefrom at both ends, a weight secured to the lower end of said rod, hooks or equivalent devices secured to the upper end of the rod, and oars, which are adapted to engage with said hooks or their substitutes, substantially as and for the purpose described.

3. In a life-raft, the combination, with a cylindrical body, pointed at one or both ends, of a weighted rod passing centrally through said body, a covered frame hinged to said body, and a rope or chain, which is fastened to said frame and adapted to be connected to the rod, substantially as and for the purpose described.

In testimony whereof I have hereunto set

my hand and seal.

CONRAD BEHRE. [L. s.]

Witnesses:

LAMBERT L. HOWELL, JOHN G. HOWELL.