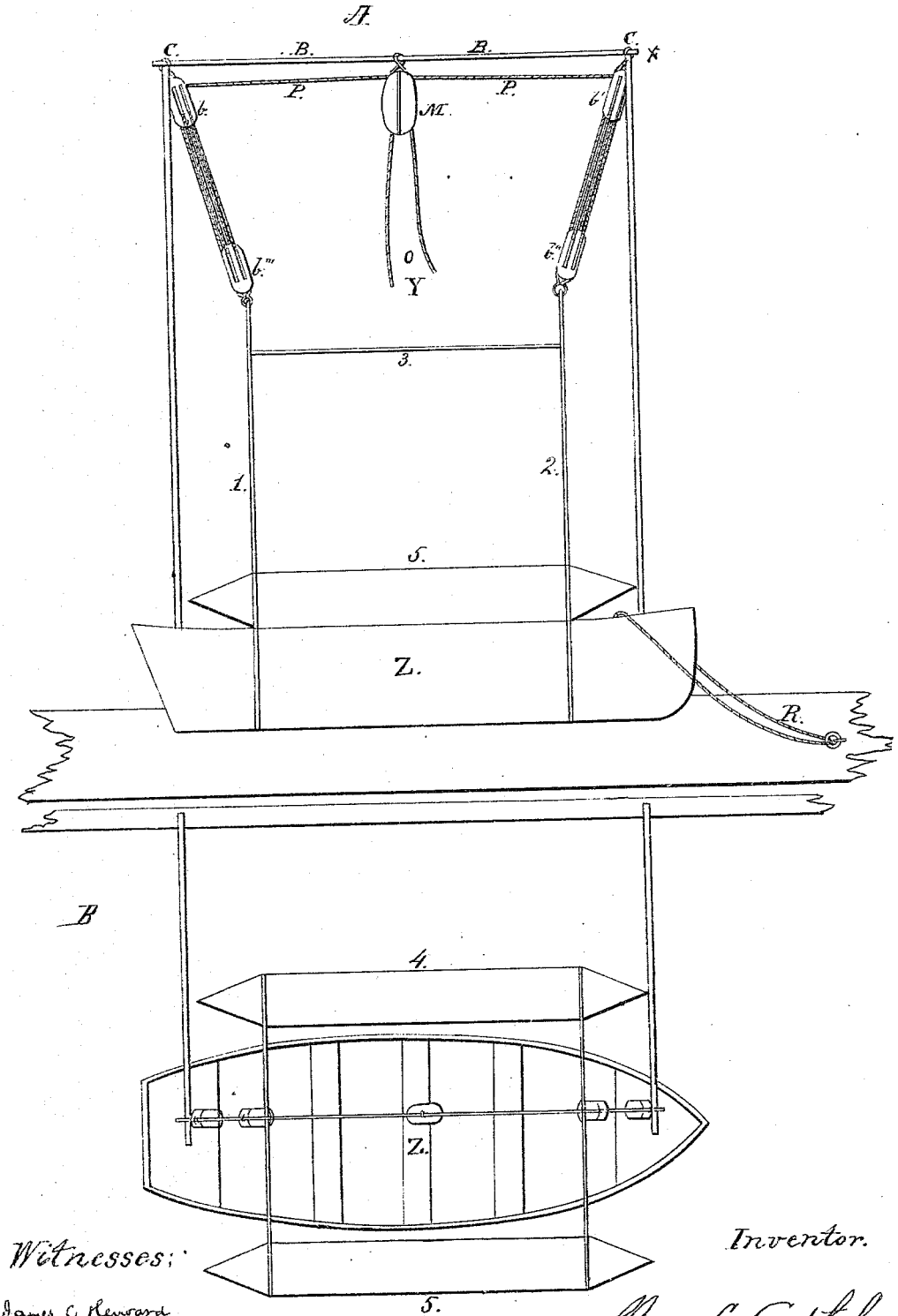
Sheet 1. 2 Sheets.

T. L. Cuthbert.

Boat Detaching.

No. 83,136. Patented Oct. 20, 1868.



Witnesses:

James C. Hayward.

Wm B Guerard

Inventor.

Thos L Cuthbert

Sheet 2. 2. Sheets.

T. L. Cuthbert.

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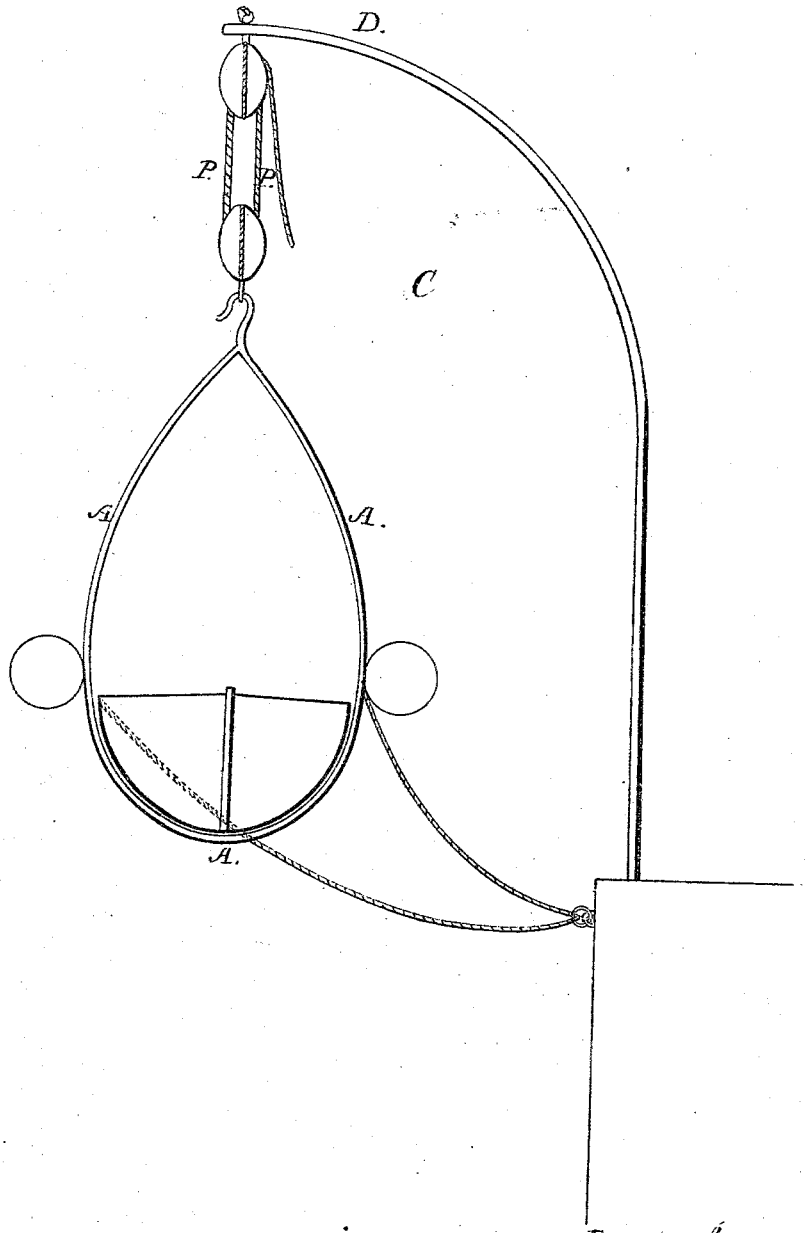

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Inventor;

Thos L Cuthbert

United States Patent Office.

THOMAS L. CUTHBERT, OF CHARLESTON COUNTY, SOUTH CAROLINA, ASSIGNOR TO HIMSELF, NATHANIEL LEVIN, AND EDWARD J. MARKS.

Letters Patent No. 83,136, *dated October* 20, 1868.

IMPROVEMENT IN BOAT-DETACHING APPARATUS.

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, THOMAS L. CUTHBERT, in the county of Charleston, and State of South Carolina, have invented a new and improved Mode of Lowering and Detaching Life-Boats or Yawls from their Davits or from over ship's sides; and I do hereby declare that the following is a full and exact description of the same.

The nature of my invention consists in providing the ordinary ship's boat or yawl with a frame-work, casing, or hammock, A, (plate C,) which is itself hung on and lowered by the pulley-ropes P P′ from the davits D D′. In this hammock, or, as I term it, "marine cradle," A, the life-boat rests, free and unattached, and floats out from it naturally to the rear on touching the surface of the water.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and use.

I construct my life-boat or yawl in any of the known forms, and I also retain the ordinary style of davit, with the exception that I connect the upper extremities of the cranes C C′ (plate A) by a stout bar, B, of iron or steel, fitted at one end with a pivot-pin, and at the other with a slot and slide, thus allowing the cranes to be turned in toward each other, and sling the boat in when not in use. The slot is provided with a clamp, X, to brace the cranes when they are in position, either in or out.

The object of this bar B is to support a middle pulley-block, M, through which the pulley-ropes P P′ pass back from the other blocks *b b′* to the hands of the persons lowering the boat's cradle, at Y. The benefit derived from this arrangement is the avoidance of danger arising from irregular lowering, by which one end of the boat is dropped, and persons thrown into the water thereby.

I will now proceed to describe the construction and use of the improvement which I propose to patent, viz, the marine cradle A.

First. I provide two stout oval hoops, 1 2, (plate A,) of iron, steel, or copper, which I connect at their smaller curves by a stout bar of similar metal, 3, which bar is attached to and hung on the pulley-blocks *b b′*, from which it is lowered. This constitutes a sort of frame-hammock, in which the yawl rests naturally, as in a double swing.

Second. On each outer side of this frame, and at a level with the yawl's gunwale, I attach a hollow cylindrical float, 5, (plate A,) extending from hoop to hoop, and provided with conical caps at each end. The diameter of these floats should be about one-third of the yawl's beam. The longer axis of the elliptic hoops should be three times, and the shorter or transverse axis of the same one and a half time the yawl's beam. The hoop should be so curved that the boat or yawl rests supported by the hoops at the gunwales, right and left, and at the keel. The material of the floats must be of copper, zinc, or, if practicable, of any other material suitable for the purpose. The connections between the hoops and the floats should be of the most substantial character, the best mode being by wire cables passing around the float, and lashed to the hoop at a level with the yawl's gunwale.

Third. To prevent the boat's swagging with the cradle, cable-chains are hung from the ship's side to the extremities of the inner float, thus preventing the waves burying either end of the cradle in the water. These cables are seen at R R′, (plate A.)

Supposing, now, that the cradle A, (plate A,) with the yawl Z in rest, is to be lowered to the water, and that the ship is under speed:

First. If the persons lowering the boat remain on the ship. In this case two men seize both of the ropes at O, and, by holding both ropes together, afford an equal and regular motion to the pulley-blocks, which connect with the cradle. On reaching the water, the boat floats out, and the cradle is ready to be again hoisted, and to serve for as many yawls as may be provided to be used.

Second. If the crew in the yawl themselves lower, care must be taken that the ropes are disengaged from the hand instantly on touching the water, for which purpose dangling ends should be avoided.

What I claim as essentially my own invention, and desire to secure by Letters Patent of the United States, is—

The "marine cradle," by which ships' boats or yawls may be lowered and detached, in the manner described in the above specification, or any other substantially the same, and which will produce the intended effect.

THOS. L. CUTHBERT.

Witnesses:

CECIL C. NEIL,

E. G. HOFFMAN.