(No Model.)

J. W. COLLINS.

ADJUSTABLE MARINE DRAG.

No. 300,764. Patented June 24, 1884.

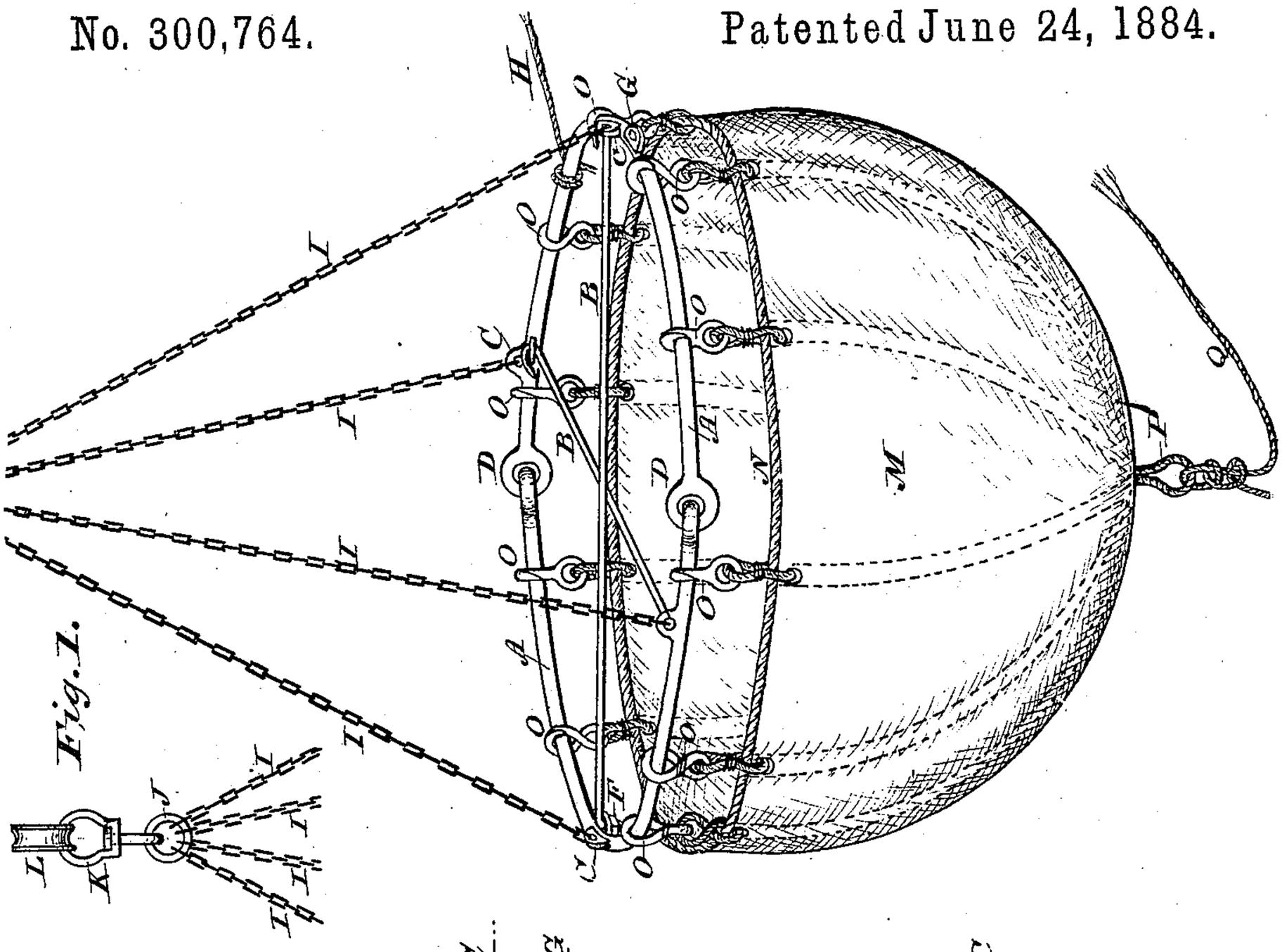

Fig. 1.

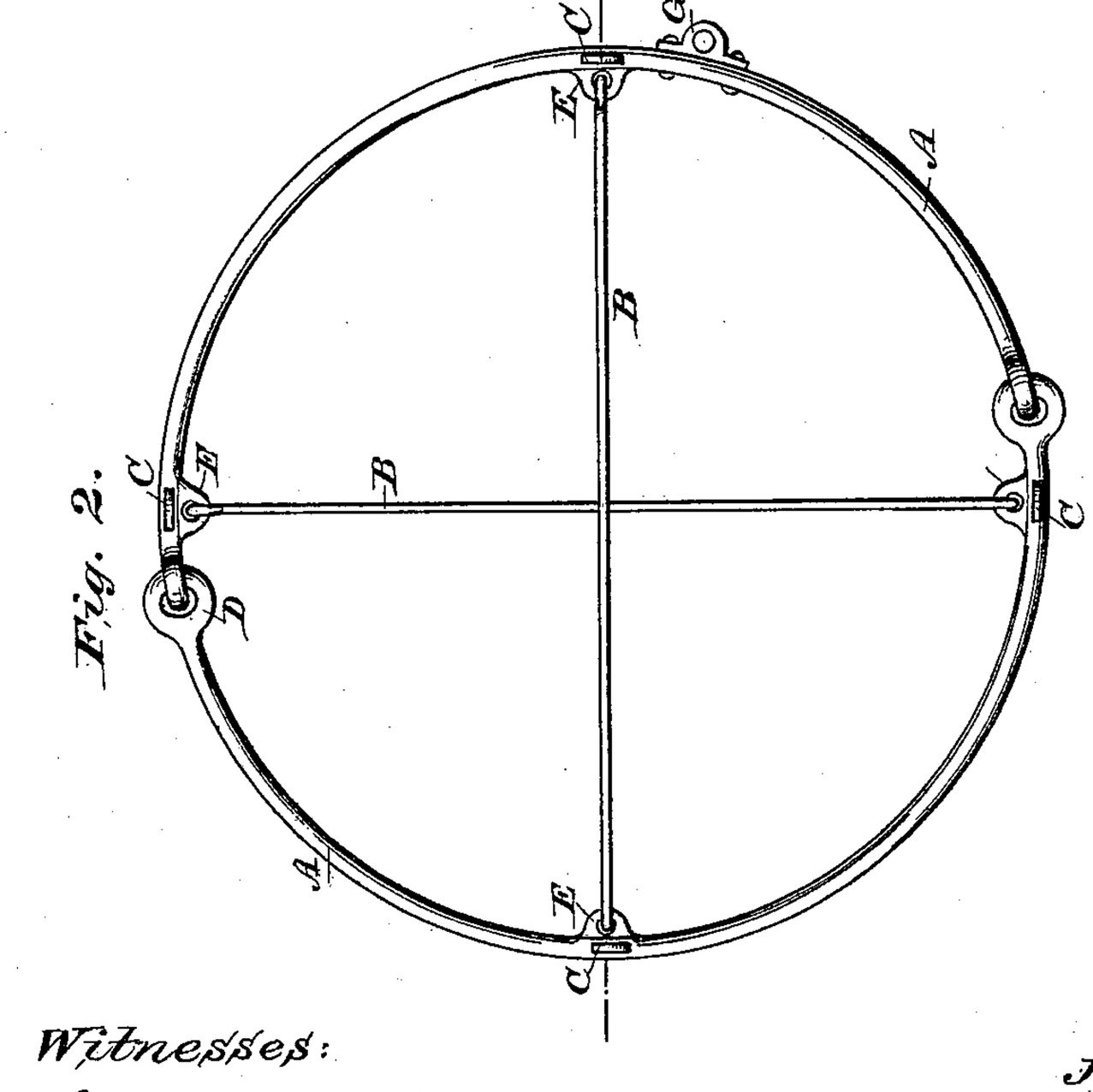

Fig. 2.

Fig. 3.

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UNITED STATES PATENT OFFICE.

JOSEPH W. COLLINS, OF GLOUCESTER, MASSACHUSETTS.

ADJUSTABLE MARINE DRAG.

SPECIFICATION forming part of Letters Patent No. 300,764, dated June 24, 1884.

Application filed March 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. COLLINS, a citizen of the United States, residing at Gloucester, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Adjustable Marine Drags or Floating Sea-Anchors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in adjustable marine drags or floating sea-anchors; and the object is to prevent foundering of sea-going vessels, especially when lying to in heavy gales, or when the machinery on steamers is broken down, or sails have been blown away, or from other causes a vessel has become unmanageable. As is well known, heretofore seamen have generally been compelled in such emergencies to rely on some sort of floating anchor improvised from spare material on shipboard—such as spars, casks, &c.—the rigging of which is generally attended with much danger and delay, at a time, too, when the utmost dispatch is desirable, if not imperative, and when completed these rudely-constructed affairs are rarely, if ever, found to answer the purpose for which they were designed, shipwreck and loss of life often being the result of their faulty construction.

To overcome all these difficulties and dangers is therefore the main object of my invention; and it consists in a novel construction and arrangement of parts, as will be more fully described hereinafter, and more specifically pointed out in the claims, reference being had to the accompanying drawings and the letters of reference marked thereon.

Like letters indicate like parts in the different figures of the drawings, in which—

Figure 1 is a perspective view of my improved drag or floating sea-anchor. Fig. 2 is a plan view of the same. Fig. 3 is a horizontal section on the line *x x* of Fig. 2.

In the drawings, A represents a hoop, of metal or other suitable material, which is jointed at D, and is kept distended and rigid by the cross-bars B, which are secured in the eyes E, that are welded to the hoop A. One end of each bar is hooked into one of the eyes, and the other end, which is bent at right angles, passes through an eye on the opposite side of the hoop A, and is held in place by a screw-nut, F, fitting on a screw-thread cut on the cross-bars B. Four (more or less) other eyes, C, are welded to the upper side of the hoop A, and into these the guys I (which may be of chains, wire-rope, or other suitable material) fasten. The other ends of these guys I meet at a common center and shackle into a ring, J, which is attached to a swivel, K. On the eye of the swivel is placed a large thimble, L, around which a hawser is fastened when the drag is in use. A fair-leader, G, is clamped, welded, or attached in any other manner to the hoop A, and through this fair-leader is rove the tripping-line Q, one end of which is bent to the becket P, while the other extends to the slip when the drag is out. The bag M, of canvas or other suitable material, is bordered around its edge with a rope, N, and has attached to it a number of match-hooks, (also called "sister" hooks and "clip" hooks,) O, which, when the drag is rigged for use, are hooked around the hoop A, as shown in the drawings.

The buoy-rope H has one end fastened to the hoop A, while the other end of the rope is attached to a buoy which floats at the surface of the water. This buoy-line serves to keep the hoop in a vertical position, thus rendering it certain that the apparatus will always be in the best possible position, while by means of the line the drag can be kept at any desired depth.

When the drag is not in use, the buoy-rope H and the tripping-line Q are unbent, the hooks O detached from the hoop A, and the bag M removed entirely from the metal framework, so that this part of the drag may be dried and stowed away by itself, where it will not be liable to injury by rust, or chafe in consequence of remaining attached to the metal. The nuts F are then removed, the cross-bars B unhooked, and the hoop A, turning on the eyes D, is folded together in the form of a semicircle, in which shape it may be stowed away in a small space.

To rig the drag the hoop A is distended, the cross-bars B hooked in their respective places

and firmly secured by the nuts F, after which the bag M is attached to the hoop A by the hooks O, and then the buoy-rope H and the tripping-line Q are bent in their proper places. This having been done, a hawser is bent into the swivel K, passing around the thimble L, and the drag is ready for use.

As few, if any, vessels have sufficient spare room to stow away any drag which is not adjustable, and as heretofore ship-masters have found it inconvenient to carry the cumbersome devices of this kind which have been made, the great desirability of using an adjustable drag like the one herein described and shown will be apparent. Moreover, the method herein described of tripping the drag when out, by brailing it up to the hoop A by the tripping-line Q, which passes through the fair-leader G, makes it possible for a ship lying to to trip her drag, set sail at once, and sail ahead to clear an anchored vessel, an iceberg, or any other obstruction which may suddenly and unexpectedly be seen to leeward in the path of the drifting craft. Another great advantage is that the device is very simple in its construction and not liable to get out of order, and can be quickly and easily rigged for use.

The bag may be attached to the hoop by other means than those shown—such as a lace-line of rope, either of wire, manila, hemp, or other material.

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

1. In an adjustable marine drag, the folding hoop A, provided with eyes D, formed as shown, the eyes C on its upper side for attaching the guys I, and eyes E, with which the cross-bars B are connected, in combination with a bag, M, attached to said hoop A, substantially as specified.

2. An adjustable marine drag consisting of a folding hoop, A, provided with eyes for attaching the cross-bars B, and guys I, connected to a swivel-hook, the bag M, supported by hooks O on said hoop, the becket at the bottom of said bag, the tripping-line, the buoy-line, and the fair-leader, all arranged substantially as set forth.

In testimony whereof I hereby affix my signature in presence of two witnesses.

JOSEPH W. COLLINS.

Witnesses:
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SUMNER D. YORK.