(No Model.)

M. E. BOSCA.

OUTRIGGER FOR BOATS.

No. 377,986. Patented Feb. 14, 1888.

Fig. 1.

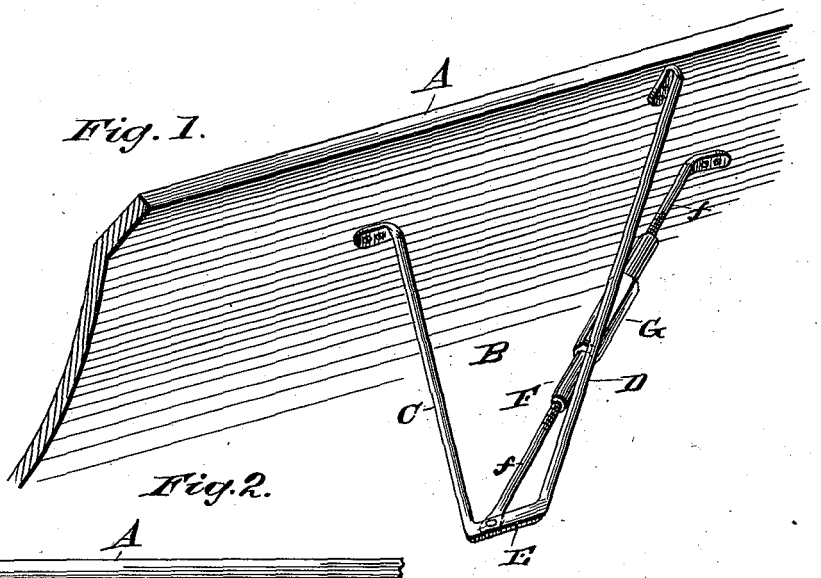


Fig. 2.

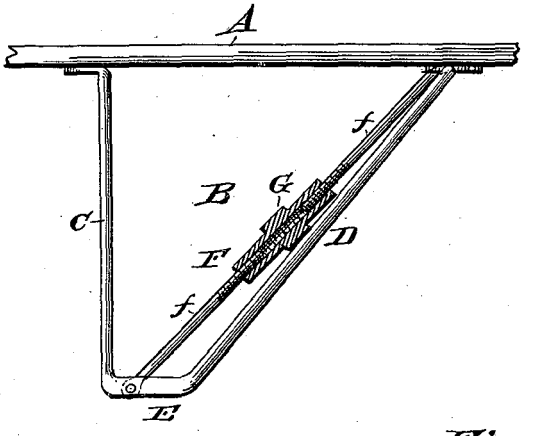


Fig. 3.

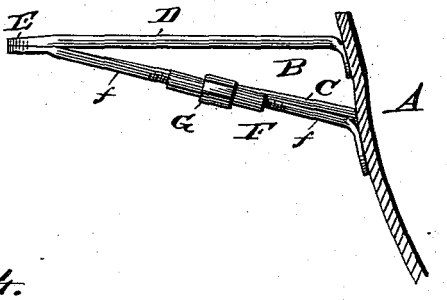
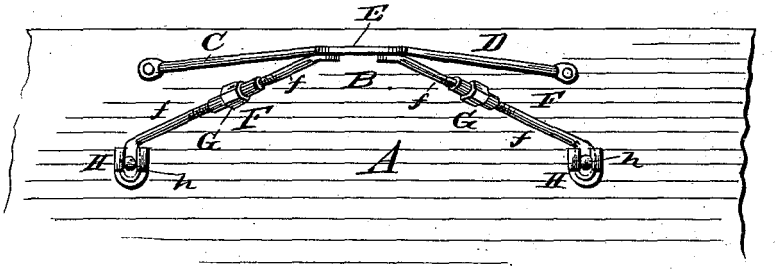


Fig. 4.



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OUTRIGGER FOR BOATS.

SPECIFICATION forming part of Letters Patent No. 377,986, dated February 14, 1888.

Application filed May 21, 1887. Serial No. 238,998. (No model.)

To all whom it may concern:

Be it known that I, MITCHELL E. BOSCA, of Lansingburg, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Outriggers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 represents a detail perspective view showing a three-leg outrigger embodying my invention. Fig. 2 is a plan view of the same, partly in section; Fig. 3, a front view. Fig. 4 represents a four-leg outrigger embodying the invention.

This invention relates to improvements in outriggers for boats; and it has for its objects to provide an adjustable outrigger-frame which is applicable to different kinds of boats, whether racing-shells or pleasure-boats, and especially designed for lightness and strength; and to these ends the invention consists in the novel construction and arrangement of the parts of the frame in relation to the boat to which it is applied, as will be fully understood from the following description, when taken in connection with the accompanying drawings.

Referring to the drawings by letters, A designates the body of a boat or shell, to which is secured the outrigger-frame B, there being two of these frames used on the finished boat, only one, however, being shown in the drawings, being deemed sufficient to fully illustrate the invention. Each frame B consists of two legs or rods, C D, the leg C extending outward at right angles to the body of the boat A, and leg D extending outward from the boat and inclining toward the leg C, and being united at its outer end to the end of this leg by a short piece, E, which runs about parallel with the length of the boat.

The parts C D E may be, and preferably are, formed integral, and the inner ends of legs C D are bent outward, flattened, and perforated for the passage of suitable screws or bolts, by which they are secured to the boat.

The legs C D have their bases sufficiently distant from each other to firmly brace the frame, and leg D is secured to the boat at a point on or just beneath the gunwale thereof, while leg C, as shown in Fig. 1, is secured to the side of the boat below the gunwale and about at the water-line, and extends outward and upward at a sufficient angle to bring its outer end in line with the outer end of leg D, which latter extends in a horizontal plane, and the piece E lies also in the same plane, as shown. Upon or to piece E are formed or secured the oar-locks proper, which may be of any proper form and construction. The legs C D are permitted a slight vertical movement on their connections with the boat A, or may be made of spring metal, to permit their outer ends, with pieces E, to be raised or lowered vertically. This is effected by means of the extensible leg or legs F, which are constructed of two sections or rods, *f f*, the united length of which about equals or is slightly greater than leg D. The inner end of the inner rod *f* is secured to the body of the boat at a point below leg D, in line with the fastening of leg C thereto, and secured in a similar manner to these legs. The outer rod *f* has its outer end secured to piece E, as shown. The adjoining ends of rods *f f* are oppositely screw-threaded, and engage correspondingly-threaded openings in the ends of a turn-buckle or sleeve, G, which is provided centrally and exteriorly with angular faces for enabling the buckle to be turned by hand or a suitable wrench. It is evident that as the turn-buckle is turned it will, according to its direction of rotation, either separate the rods *f f*, and consequently lengthen leg F, and thereby elevate the piece E, the springiness of the legs C D permitting this, or else will cause rods *f f* to approach, and thereby shorten legs F and lower piece E, and with it the oar-lock thereon.

It is evident from the foregoing that the occupant of the boat can readily adjust the height of the oar-lock above the water to suit himself. The leg F not only serves to adjust the position of height of the oar-lock-bearing piece E, but it also supports the ends of legs C D, forming therewith a kind of tripod, upon which the oar-lock is supported, and by having the adjustable leg F arranged below the leg D the turn-buckle is not liable to be struck and injured or shifted by the oars.

In Fig. 4 the legs C D are both attached to the gunwale of the boat, and two adjustable legs F F are employed, one beneath each of the former legs, forming what is termed a

"four-leg" outrigger, the operation of both outriggers being, however, the same.

In order to prevent undue strain on the legs of the outrigger-frames when the oar-locks have to be adjusted very high, I propose using the socket-plates H, (shown in Fig. 4,) which receive the feet or bent ends of the legs, and are preferably provided with set-screws *h*, by which the feet can be locked in position.

It is obvious that by means of slotted plates A the oarsman can readily raise or lower the inner ends of the legs of frame B, and consequently can readily adjust the oar-lock to a greater extent than if the fastenings of frame B were rigid. The legs C D may also be constructed in sections, screw-threaded, and united by a turn-buckle, if desired. When so made, the "spread" or distance of the oar-lock from the oarsman can also be regulated to suit different lengths of oars. It will further be observed that by the use of the adjustable legs F F of opposite frames B, when used on shells or other small boats, one oar-lock can be set above the other, so that the oarsman can row left-over-right or right-over-left, this being a great advantage.

I am aware that devices have been employed for regulating or varying the position of the oar-locks; but my invention differs from these both in the general arrangement of frames B and in the special construction of the adjusting-legs thereof.

Having described my invention, I claim—

1. In an outrigger, the combination, with the outstanding legs carrying the oar-lock rest, of an adjustable leg secured to the rest and to the side of the boat, and devices for lengthening or shortening this leg, substantially as described.

2. In an outrigger for boats, the combination, with the opposite outstanding legs supporting the oar-lock rest, of the adjustable leg F, composed of pieces *f f*, and turn-buckle G, all constructed and arranged substantially as and for the purpose specified.

3. The outrigger-frames B, composed of legs C D, and connecting-piece E, formed integral therewith, and the adjustable leg F, connected at one end to piece E, and means for lengthening or shortening this leg, substantially as and for the purpose described.

4. In combination with a boat, A, an outrigger-frame, B, composed of leg C, standing at right angles to the boat, the leg D, secured to the boat and inclining forward and outward to the end of leg C, and the connecting-piece E between said legs, and the adjusting-leg F, composed of rods *f f*, and turn-buckle G, all substantially as specified.

5. The combination, with boat A, of an outrigger-frame, B, composed of an upwardly-inclined leg, C, secured at its inner end to the boat near its water-line, the inclined leg D, connecting with leg C by a short oar-lock-bearing piece, E, and secured to the gunwale of the boat, and parts C D E, formed integral, and the adjusting-leg F, composed of the short rods *f f*, united, respectively, to the piece E and to the boat A near its water-line, and having their adjoining ends oppositely screw-threaded, and the turn-buckle G, uniting and adjusting the rods *f f*, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

MITCHELL E. BOSCA.

Witnesses:
G. W. WILLSON,
E. WARREN BANKER.