(No Model.)

# F. A. ALLEN.

## ROWING OAR.

No. 309,504. Patented Dec. 16, 1884.

Fig 1.

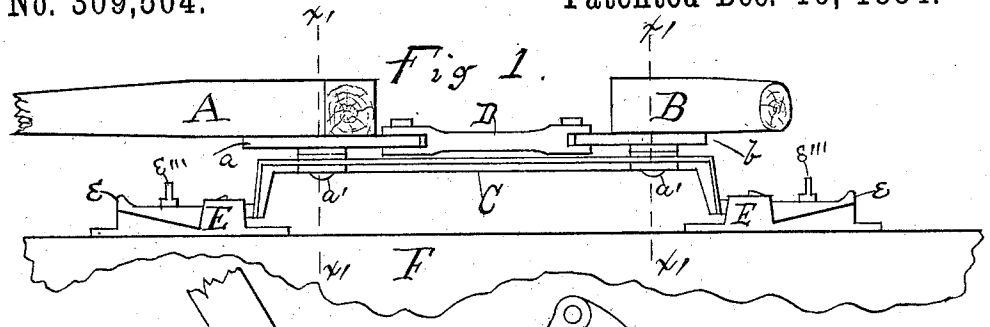



Fig 2.

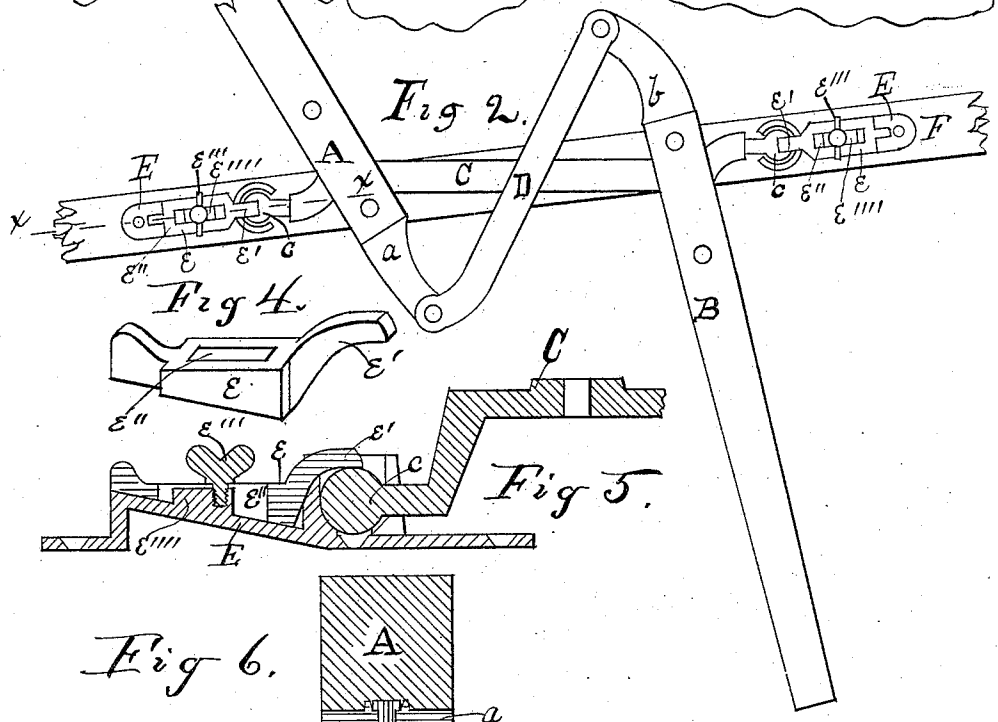



Fig 4.



Fig 5.




Fig 6.

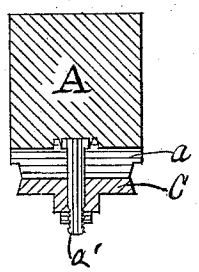
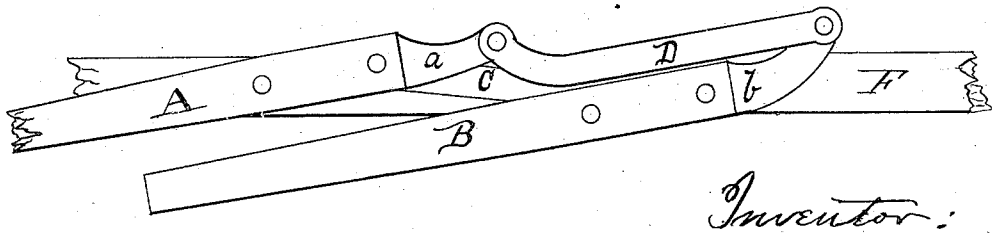



Fig 3.




Witnesses
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# UNITED STATES PATENT OFFICE.

FRED A. ALLEN, OF MONMOUTH, ILLINOIS, ASSIGNOR OF ONE-HALF TO FRED E. HARDING, OF SAME PLACE.

## ROWING-OAR.

SPECIFICATION forming part of Letters Patent No. 309,504, dated December 16, 1884.

Application filed June 21, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, FRED A. ALLEN, a citizen of the United States, residing at Monmouth, in the county of Warren and State of Illinois, have invented certain new and useful Improvements in Rowing-Oars; and I do hereby declare the following to be a full, clear, and exact description of the same, and such as will enable others skilled in the art to make and use them.

My invention relates to improvements in rowing-oars, the object of the same being to provide an oar that shall be simple in construction and of the least possible number of parts, easy of operation, and so arranged that the oarsman will sit facing the direction of the movement of the boat, and also be capable of attachment in a quick and easy manner to the gunwale of any kind of a boat, and that when being so attached and in position for use the oars will be directly in line laterally with the oarsman's seat, and that the sweep or stroke of the oars may be in no way shortened or obstructed by the device for reversing the motion of the handle, and that the blades of the oars may move freely from stem to stern of the boat. As the prime object of a bow-facing oar is to meet the wants of sportsmen, it is important that the oar, on being released, should take care of itself, and also be noiseless in its operation.

My invention further relates to improvements in which the oars, on being released when the boat is in motion, will float in toward the sides of the boat, but by reason of being pivoted outside of the gunwale and farther back than has heretofore been usual with bow-facing oars, being at or near the middle and widest part of the boat, will not strike against the boat's sides, and to provide means for taking up the play caused by the wear of the parts, thereby rendering their operation noiseless; and, also, to provide an oar and handle that may be folded together and brought inside of the boat without detaching from the gunwale; also, to provide a gunwale-plate, to which the rocking plate is attached, of such improved form and construction that it may be applied to the gunwale and made to conform to its contour without affecting the operation of the oars. I obtain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical view of the oar; Fig. 2, a plan view of the same in the middle of a stroke; Fig. 3, a plan view showing the oar and handle folded together inside of the boat; Fig. 4, a view in perspective of the lock-plate for securing the oar in position and for taking up the wear between the contacting-surfaces of the rocking and gunwale plates. Fig. 5 is a sectional view through $x\ x$, showing in detail the manner of hinging the ends of the rocking plate to the gunwale-plates, the device for taking up slack, and manner of securing and adjusting the lock-plates; and Fig. 6 is a cross-section through $x'\ x'$, showing in detail the manner of securing the oar and handle plates to the rocking plate.

F represents the gunwale of a boat, to the top of which are rigidly secured, by means of screws or in any other suitable manner, the plates E E, having sockets open at the top for the reception of the balls $c\ c$ on the ends of the rocking plate C, said sockets being cut away at their inner sides sufficiently to admit of the plates E E conforming to the curve of a boat's side without binding against the necks of the balls $c\ c$, and further provided with inclined top surfaces as seats for the locking-plates $e\ e$, said plates $e\ e$ being longitudinally slotted, $e''\ e''$, to receive the raised guides $e'''\ e'''$ on the plates E E, and being further provided at their inner ends with the fingers or projections $e'\ e'$, the plates $e\ e$ being secured to the gunwale-plates E E by means of the thumb-screws $e'''\ e'''$, having the fingers $e'\ e'$ bearing on the tops of the balls $c\ c$, the rocking plate C being offset at the ends in such a manner as to bring the pivotal points of the oar-plate $a$ out and the handle-plate $b$ in side of the gunwale F.

Pivoted to the top of the rocking plate C is the oar plate or socket $a$, to the inner end of which is pivoted the curved end of the connecting-bar D. To the outer or straight end of the said connecting-bar D is pivoted the curved end of the handle plate or socket $b$,

said handle plate or socket *b* being pivoted to the top of the rocking plate C, the curvatures at the outer end of the handle-plate *b* and the inner end of the connecting-bar D being to admit of the oar A and the handle B being brought into positions parallel to each other.

In the oar and handle plates *a* and *b*, I do not confine myself to the mode of attaching the oar A and handle B shown in the drawings, as it may be deemed advisable to construct the plates *a* and *b* in the form of sockets to encircle the ends of the oar and handle; and it is further evident that other slight changes in the construction and relative arrangement of the several parts might be resorted to without departing from the spirit of my invention; and hence I would have it understood that I do not limit myself to the exact construction shown and described, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

I am aware that prior to my invention patents have been granted for bow-facing rowing-oars. I therefore do not claim such a combination, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, in the bow-facing rowing mechanism, with the oar A, the handle B, the oar-plate *a*, and the handle-plate *b*, of the rocking plate C, having its ends terminating in the balls *c c*, and offset at each end outside of the pivotal points of the plates *a* and *b*, in the manner shown and described, and for the purposes set forth.

2. In a bow-facing rowing mechanism, the combination, with the oar A, the handle B, the oar-plate *a*, the handle-plate *b*, and the rocking plate C, of the curved connecting-bar D, having its inner or curved end pivoted to the inner end of the oar-plate *a*, and its outer or straight end pivoted to the outer or curved end of the handle-plate *b*, substantially as and for the purposes set forth.

3. The combination, in a bow-facing rowing mechanism, with the oar A, the handle B, the oar-plate *a*, the handle-plate *b*, the rocking plate C, and the connecting-bar D, of the gunwale-plates E E, provided with sockets for the reception of the balls *c c*, and further provided with the adjustable locking-plates *e e*, all substantially as shown, and for the purposes set forth.

In testimony whereof I have signed this specification in the presence of subscribing witnesses.

FRED A. ALLEN.

Witnesses:
H. B. WEBSTER,
FRANK W. HARDING,
H. H. PATTEE.