Nov. 6, 1923. 1,473,557

J. L. INGERSOLL

BOW FACING OAR

Filed Feb. 1, 1923

Fig. 1.

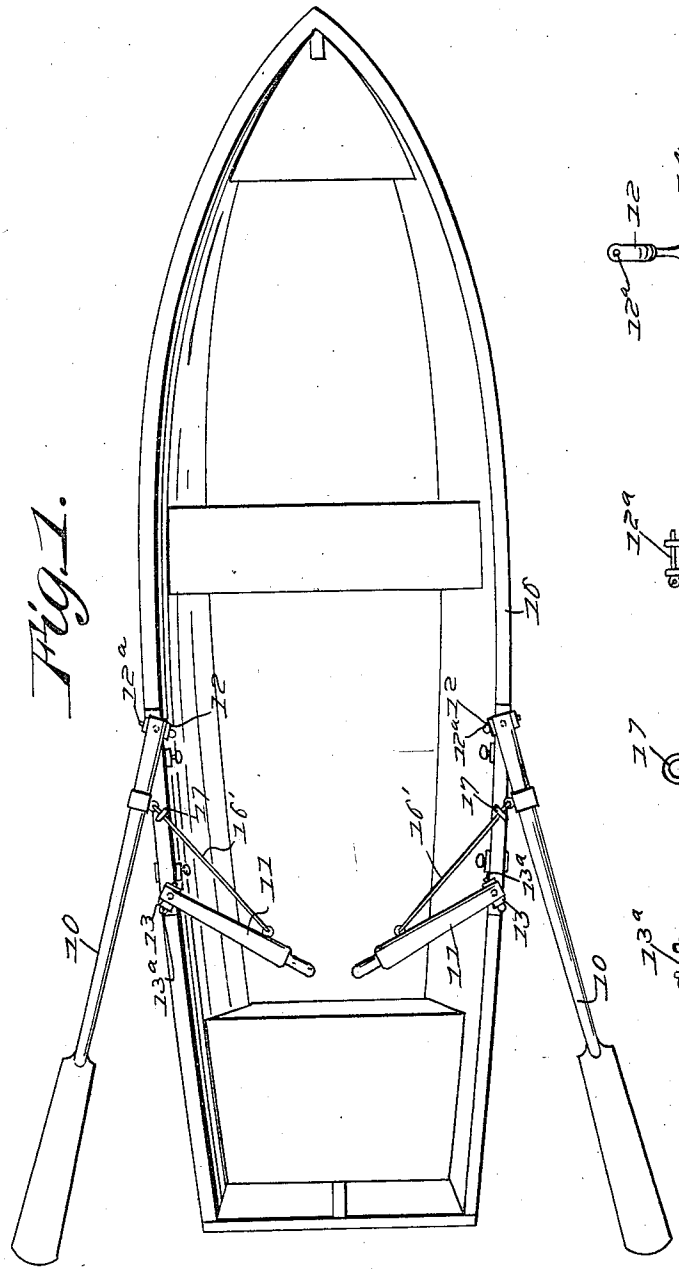


Fig. 3.

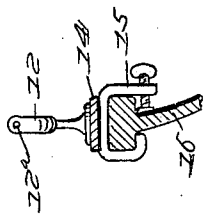
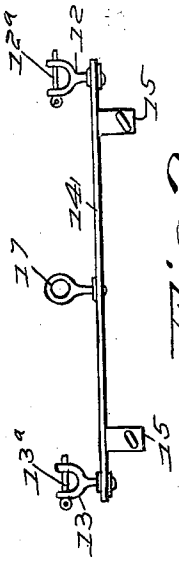


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN L. INGERSOLL, OF EVART, MICHIGAN.

BOW-FACING OAR.

Application filed February 1, 1923. Serial No. 616,306.

To all whom it may concern:

Be it known that JOHN L. INGERSOLL, a citizen of the United States of America, residing at Evart, in the county of Osceola and State of Michigan, has invented new and useful Improvements in Bow-Facing Oars, of which the following is a specification.

The object of the invention is to provide a simple and efficient construction of bow facing oar or rowing apparatus having in addition to the advantage of enabling the operator to face in the direction of movement the capability of enabling the operator to control the movements of the oar in all essential particulars with substantially the same facility as when the oar is of the ordinary type and is provided with a single shank terminally carrying the blade and grip; and with this object in view the invention consists in a construction and combination of parts of which a preferred embodiment is shown in the accompanying drawings, wherein:—

Figure 1 is a plan view of a rowing apparatus embodying the invention applied to a boat.

Figure 2 is a detail side view of the rigging.

Figure 3 is a transverse sectional view of the rigging to show the means of attachment to the gunwale.

Essentially the apparatus consists of a laid shank 10 and a handle or grip shank 11 pivotally mounted for vertical swinging movement respectively in row locks 12 and 13 swivelled upon a base plate 14 having clamps 15 for engagement with the gunwale 16 of the boat; and a link 16 connecting said shanks and extending through a guide eye 17 carried by said base plate at an intermediate point between the row locks and serving as a universal fulcrum for the link.

Obviously the row locks afford means for swinging movement in horizontal planes of the blade and grip shanks while the pivotal mounting of said shanks in the row locks by reason in the construction illustrated of the pivot pins 12^a and 13^a provides for free swinging movement of said shanks in vertical planes, so that both shanks are universally mounted upon the rigging represented by the base plate which with the shank mountings is applicable as a single attachment to the gunwale of the boat.

Inasmuch as the connecting link between the shanks, in addition to its freedom to slide through the guide eye is capable of universal swinging movement therein or in other words is universally fulcrumed, it is obvious that any movements imparted by the operator to the grip shank will be communicated with fidelity through the link to the blade shank, so that the movements of the blade are accurately within the control of the operator. Moreover it should be noted that by reason of the link and its mounting and means of guiding, the depression of the grip will cause an elevation of the blade corresponding therewith just as the depression of the grip of an ordinary oar will cause the elevation of its blade, and conversely the elevation of the grip will cause the depression of the corresponding blade as in the use of the ordinary oar, so that the movements of the rower are practically the same as with the ordinary oar, with the advantage as above intimated that the progress of the operator is forward instead of backward as when oars of the ordinary type are used in the ordinary way.

Having described the invention, what is claimed as new and useful is:—

1. A bow facing rowing apparatus having universally mounted blade and grip shanks connected by a link having a guide in which it is universally fulcrumed.

2. A bow facing rowing apparatus having universally mounted blade and grip shanks connected by a link having a guide in which it is universally fulcrumed, the said shanks being pivotally mounted in swivelled row locks.

3. A bow facing rowing apparatus having universally mounted blade and grip shanks connected by a link having a guide in which it is universally fulcrumed, the guide for the link consisting of an eye arranged between the mountings of said shanks.

4. A bow facing rowing apparatus having universally mounted blade and grip shanks connected by a link having a guide in which it is universally fulcrumed, said apparatus having a rigging consisting of a base plate

for arrangement upon the gunwale of a boat and provided with clamps for engaging said gunwale.

5. A bow facing rowing apparatus having universally mounted blade and grip shanks connected by a link having a guide in which it is universally fulcrumed, said apparatus having a rigging consisting of a base plate for arrangement upon the gunwale of a boat and provided with clamps for engaging said gunwale, said base plate terminally carrying row locks in which the said shanks are pivotally mounted, and also carrying a swivelled eye forming the guide for said link.

In testimony whereof I affix my signature.

JOHN L. INGERSOLL.