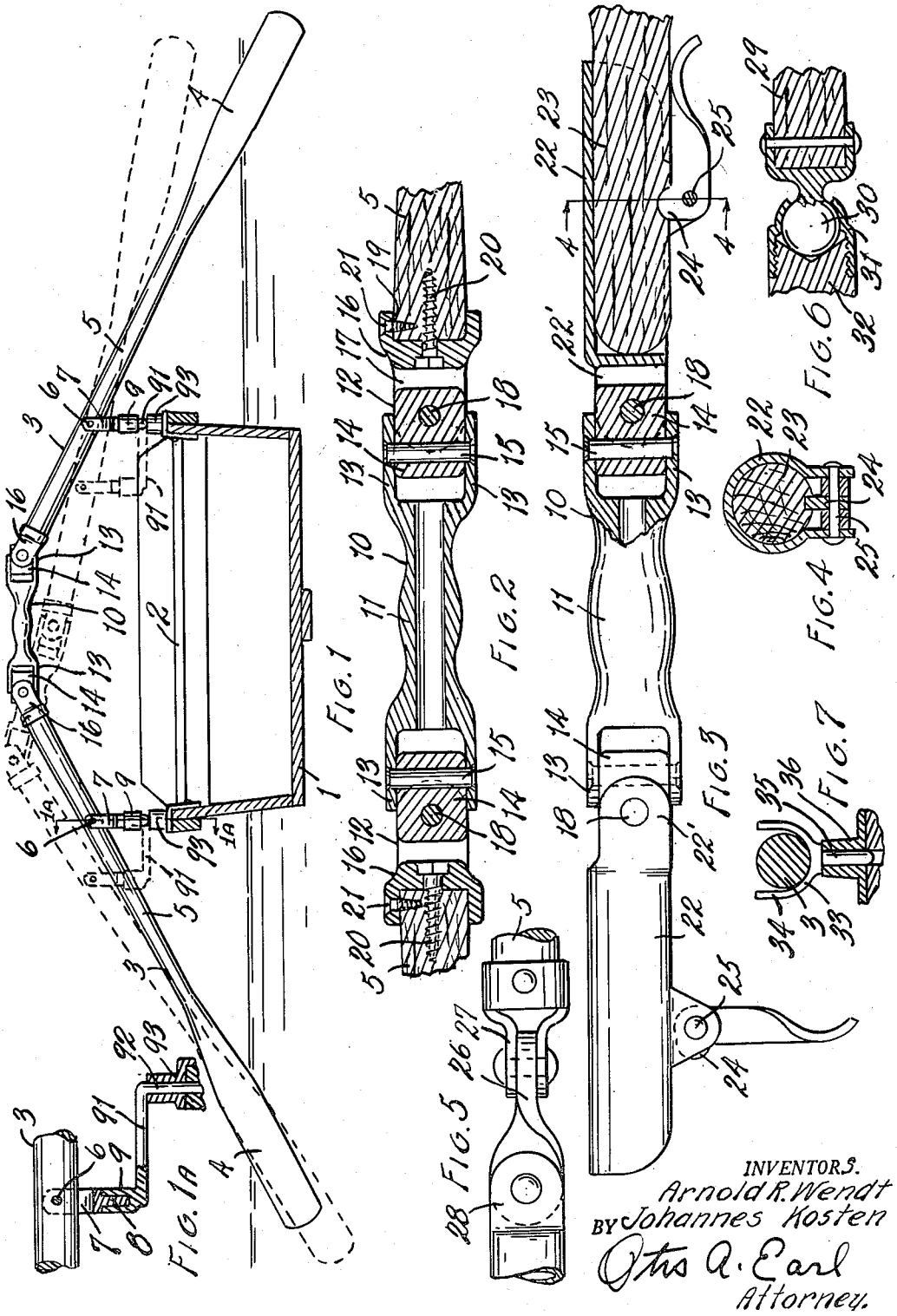
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OAR ASSEMBLY

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OAR ASSEMBLY

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This invention relates to improvements in oar assemblies.

The main objects of this invention are:

First, to provide an oar assembly or rowing apparatus or device in which the oars may be effectively operated with one hand.

Second, to provide a rowing apparatus having this advantage which may be easily manipulated to steer the boat.

Third, to provide a rowing apparatus of this character which may be manipulated with the operator facing forwardly or rearwardly as he may desire.

Fourth, to provide a rowing apparatus or device having these advantages which is very economical in its parts and in the assembly thereof.

Fifth, to provide a device of this character which may be readily embodied in or applied to widely used types of oars.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is defined and pointed out in the claims.

Preferred embodiments of the invention are illustrated in the accompanying drawing, in which:

Fig. 1 is a cross-sectional view of a boat equipped with the oar assembly of the invention, the oars being shown by full lines in dipped position, the oars and associated parts being shown in dotted outline in another position in which only one oar is dipped, the other being in a raised or elevated position.

Fig. 1A is an enlarged fragmentary view partially in section on the line 1A—1A of Fig. 1, illustrating structural details of the mounting of the oars on the boat.

Fig. 2 is an enlarged longitudinal section showing the relation of the handle bar to the oars in a preferred embodiment thereof.

Fig. 3 is a side elevational view partially in longitudinal section of a modified form or embodiment of the invention in which the handle bar is connected to the oars by means of a clamp providing for quick attachment and detachment.

Fig. 4 is a cross-sectional view on line 4—4 of Fig. 3.

Fig. 5 is a fragmentary view of a modified form of universal joint connection for the handle bar to the oars.

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Fig. 6 is a fragmentary view mainly in section of another modification in which the universal joint is of the ball and socket type.

Fig. 7 is an enlarged fragmentary view partially in section illustrating another adaptation of the invention.

Referring to the accompanying drawing and the embodiment of the invention shown in Figs. 1, 1A and 2, 1 represents a boat of the flat bottom type and 2 a seat thereof. The oars 3 illustrated comprise the blades 4 and shafts or looms 5. The oars are pivoted at 6 on the stirrups of the row locks which are provided with vertical swivel stems 8 engaged in suitable vertically elongated sockets 9 in the angled brackets or supporting arms 91 which are provided with stems or spindles 92 engaging the sockets 93 on the gunwales of the boat as more clearly shown in Fig. 1A. The upwardly extending member provided with a socket 9 at one end of each arm 91 constitutes a vertical bearing member for the row lock for horizontal swinging movement of the same on the arm, and the downwardly extending spindle 92 at the opposite end of each arm 9 engaging in the socket 93 on the gunwale of the boat provides means for horizontal swinging movement of each arm 91 on the gunwale. The inner ends of the oar looms or shafts 5 are substantially spaced.

The handle bar 10 is provided with a grip 11 disposed centrally thereof and adapted to be grasped by one hand of the operator. The ends of the handle bar are connected to the oars by universal joint connections designated generally by the numeral 12.

In the embodiment illustrated in detail in Fig. 2 the handle bar 11 is provided with forks 13 at its ends receiving the journal or central block 14 which is pivotally connected thereto by the journal or pivot pin 15. The joint members 16 are provided with forks 17 embracing the journal member 14 and secured thereto by the pivot or journal pin 18. The journal pins 15 and 18 are arranged transversely to each other or at 90° angular relation.

The members 16 are provided with sockets 19 receiving the ends of the oars, being secured thereon by the longitudinal screws 20 and the transverse screws 21. This provides a connection

for the oars which permits their simultaneous actuation with one hand.

The handle bar may be tilted as shown by dotted lines in Fig. 1 to lift one oar to inoperative position, allowing the other oar to be dipped for steering the boat. This arrangement permits a fisherman, for example, to manipulate his fishing tackle with one hand while operating the boat with the other. It also enables handicapped persons to row effectively.

In the modification of the invention shown in Figs. 3 and 4 the joint members 22' are provided with sockets 22 adapted to receive the grip portion 23 of the oar, the clamp member 24 pivoted at 25 securely clamping the oar to the joint member.

In the embodiment shown in Fig. 5 the center coupling elements 26 are formed of flat metal stock, given a quarter turn, to present its ends to the joint members 27 and 28 on the oar and handle respectively. The structure is substantially that shown in Figs. 1 and 2 with the exception of substitution of the coupling member or joint member 26 for the coupling or joint member 14.

In the embodiment shown in Fig. 6 the handle 29 is provided with a ball joint member 30 at each end coacting with the socket joint members 31 which are threaded upon the oars 32.

Fig. 7 is an adaptation of our invention to a row lock 33 of the type in which the shaft or loom of the oar 3 rests loosely in the fork 34 of the row lock, the row lock being provided with a stem 35 pivoted in the socket 36 on the gunwale of the boat. This avoids the use of the supporting arms or brackets 91 but requires somewhat more skill and effort on the part of the operator in the manipulation of the oars. For straight rowing the stems 8 of the row lock 7 may be engaged directly with the row lock sockets on the boat. However, the supporting arms add greater flexibility and scope of manipulation and greater ease in manipulation.

We have illustrated practical embodiments of the invention. We have not attempted to illustrate or describe other embodiments or adaptations which we contemplate as it is believed that this disclosure will enable those skilled in the art to embody or adapt the invention as may be desired.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. An oar assembly comprising a pair of oars, row locks to which said oars are pivotally connected, a pair of horizontally swingable oar supporting arms for connection to the opposite sides of a boat, each arm at one end thereof having a downwardly projecting spindle for horizontally swingable connection of the arm to a boat, each arm at the opposite end thereof having an upwardly projecting member provided with a vertically elongated socket for horizontally swingable connection of the row lock to the arm, a handle bar provided with a central grip, and universal joints connecting the ends of the handle bar to the inner ends of the oars between said row locks, whereby said oars may be simultaneously actuated from the handle bar and selectively tilted to non-operative position by tilting the handle bar.

2. In a rowing device, the combination of a pair of oars, a handle bar disposed between and having universal joint connections to the inner ends of the oars, row locks to which said oars

are pivotally connected, said joint connections being connected to the oars between said row locks, and horizontally swingable supporting arms, a row lock being swivelly engaged to one end of each arm for horizontal swinging movement thereon, said supporting arms each having at the opposite end thereof a downwardly projecting spindle for horizontally swingable connection of the arm to a boat at points spaced from said row locks.

3. A rowing device comprising a pair of oars provided with swivel oarlocks on which the oars are pivotally mounted, the inner ends of the oars being substantially spaced, a handle bar, and universal joints connecting the ends of the handle bar to the inner ends of the oars between said row locks, and means for movably supporting said row locks on a boat for bodily movement of the row locks to and from each other upon operation of the oars by said handle, said oar locks being horizontally swingable on said means and being supported by said means for substantially horizontal bodily movement of the same to and from each other.

4. A rowing device comprising in combination a pair of oars having means intermediate the ends thereof for swingably connecting the oars to a boat, a handle bar having a universal joint at each end thereof, the outer members of said universal joints being provided with clamps for detachably securing them to the inner ends of said oars.

5. In a rowing device, the combination of a pair of swivelly and pivotally supported oars, a handle bar, and universal joints at the ends of said handle bar provided with clamps detachably engageable with the inner ends of the oars, said clamps including tubular members telescopingly engageable over the inner ends of the oars, and members adjustably supported by said tubular members for clampingly engaging said inner ends.

6. A rowing device comprising a pair of oars provided with swivel oarlocks on which the oars are pivotally mounted, the inner ends of the oars being substantially spaced, a handle bar, and ball and socket universal joints connecting the ends of the handle bar to the adjacent inner ends of the oars.

7. In a rowing apparatus, the combination of a pair of oars provided with row locks on which the oars are pivotally mounted, a handle bar, and universal joint connections for the ends of said handle bar to the adjacent inner ends of the oars between said row locks, said handle bar having forked ends, joint forks secured to the inner ends of said oars, journal blocks, and pivot pins for said journal blocks carried by said forks and arranged transversely to each other and members for movably supporting said row locks on a boat for bodily movement of the row locks to and from each other during the operation of the handle.

8. In a rowing apparatus the combination of a pair of oars, row locks to which the oars are pivotally connected, supporting arms having substantially vertical sockets for said row locks at their outer ends for substantially horizontally swingable connection of the row locks to the arms, said arms having means at their inner ends for substantially horizontally swingable connection of the arms to a boat, and a handle bar having universal joint connections to the inner ends of said oars.

9. In a rowing apparatus the combination of a pair of oars, row locks for the oars, substantially horizontally swingable supporting arms for said row locks means at the outer ends of said arms for substantially horizontally swingably connecting the row locks to the arms, means at the inner ends of said arms for substantially horizontally swingably connecting the arms to a boat, and a handle bar having universal joint connections to the inner ends of said oars.

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