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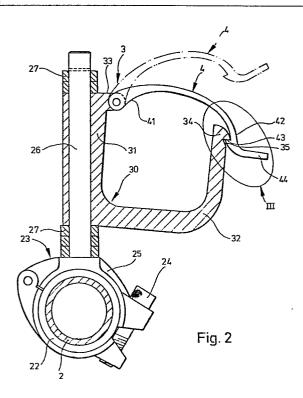
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64 Oar crutch for row boats.

G7 An oar crutch for row boats comprising a generally U-shaped crutch body having inner and outer arms (31; 32) as well as comprising an elastic retaining member (4) for connecting the ends of the crutch body arms. One end of the retaining member is hinged to the outer end of the inner arm (31) whereas the other end i.e. the leading end portion of the retaining member can be brought into engagement with the leading end portion (34) of the outer crutch body arm (32). For locking the leading end (42) of the retaining member to the outer arm (31) a stopper projection (43) and a notch (35) are provided in the leading end portion of said retaining member and the associated portion of the outer crutch arm, respectively.



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GRÜNECKER, KINKELDEY, STOCKMAIR & PARTNER

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PATENTANWALTE

A SPUNECKEP IM NO
DD IM KINKELDEY IM NO
DD W STOCKMARR DM IM AREICAIRON
DD Y SCHUMANIA DM IMIN
DM G BEZOLD DM DW
M MEISTER DM IM
H HLGERS DM IM
DD H MEYER-PLATH DM IM

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10 OAR CRUTCH FOR ROW BOATS

- of the type comprising a generally U-shaped crutch body having an inner arm and an outer arm and further comprising a retaining member for connecting the ends of the two crutch body arms. One end portion of the said retaining member is hinged to the end portion of the inner arm whereas the leading end portion of said retaining member can be brought into engagement with the end portion of said outer arm.
- 25 An oar crutch of this type can be provided at the leading end portion of an outrigger which protrudes outwardly from each side of a row boat.
- An oar crutch is known in accordance with the prior art portion of claim 1, in which a rigid retaining member is provided for connecting the ends of the two crutch body arms for preventing the oar from slipping out of the crutch body. More specifically, an engaging member is provided which is screwed into the leading end portion of said retaining member thereby to effect an engagement between the crutch body and the retaining member. The leading end portion of the retaining member

1 is inserted into a slit which is formed in the end portion of the outer crutch body arm.

According to the prior art construction outlined above, however, each time the oar is attached or detached from the crutch, the engaging member has to be turned to fasten or release thereby to engage or disengage the retaining member. This operation results in the disadvantage that a lot of time is involved in each enagement and disengagement operation, respectively. Since in particular the oar crutch is positioned to protrude outward from each side of the boat, the boat is liable to have its balance lost during the aforementioned operation, thereby running the risk that the boat will overturn.

The invention as claimed is intended to remedy these drawbacks. It solves the problem of how to design an oar crutch for row boats in which the retaining member 20 can be easily attached or detached. In view of the background thus far described, the present invention contemplates to provide an oar crutch which can considerably simplify the engagement and disengagement of the retaining member and the crutch body so that the attaching or detaching operations of the oar may be accomplished with ease.

The advantages offered by the invention are mainly that the engagement or disengagement operation between the crutch body and the retaining member each can be effected by a single action in which the retaining members end portion is moved downwardly and upwardly, respectively. These simple operations can be carried out without the risk that the boat will overturn.

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One way of carrying out the invention is described in detail below with reference to drawings which illustrate only one specific embodiment, in which:

- 1 Fig. 1 is a plan view showing the whole construction of a row boat with which the inventive oar crutch can be used,
- 5 Fig. 2 is an enlarged section taken along line II-II of Fig. 1, and
 - Fig. 3 is a perspective view showing a portion III of Fig. 2,

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- Fig. 4 is a sectional view showing a prior art oar crutch.
- The row boat shown in Fig. 1 is made of fibre reinforced plastics and comprises a deck 1, for outriggers 2 each being provided with an oar crutch 3 at its leading end. Each outrigger 2 is attached to the deck 1 and is supported by a supporting arm 21. As shown in Fig. 2, a crutch mounting member 23 is attached by means of a
- clamping member 22 to the leading end portion of an outrigger 2. This crutch mounting member 23 is comprised of a fixed portion 25, which is fastened by means of a bolt 24 while clamping the clamping member 22 and of a post 26 which is disposed to protrude upwardly from
- the upper portion of said fixed portion 25. The oar crutch is mounted for rotational movement around post 26. Reference numeral 27 indicates a spacer.
- The oar crutch 3 is constructed of a crutch body 30 and a retaining member 4. The crutch body 30 comprises an inner arm portion 31, which is rotably mounted on the post 26 further comprising an outer arm portion 32, which by means of a horizontal web is connected to the inner arm portion 31 to form a generally U-shaped structure.

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The retaining member 4 is hinged with its one end portion to the inner crutch arm 31. The retaining member is

- 1 formed of an elastic material such as a synthetic resin and into such a shape that it has its leading end portion 42 bent downwards. The retaining member 4 thus formed is pivotably mounted at its base end portion to a leading 5 end 33 of the crutch arm 31. Moreover, the retaining member 4 is provided at its leading end portion 42 with both a stopper projection 43 and a tongue 44, said stopper projection 43 having its upper portion protruding in the upward direction and said tongue 44 leading hor-10 izontally from that stopper projection 43. end portion 42 of the retaining member is so constructed as to elastically urge the outer side of the leading end 34 of the crutch arm 32. More specifically, the crutch body 30 and the retaining member 4 are so sized and 15 shaped that the leading end 34 of arm portion 32 is pushed inwardly by the retaining member 4 after these two parts have been brought into engagement with each other.
- 20 The leading end 34 of the crutch body arm portion 32 has its outer side formed with a notch 35 corresponding to the stopper projection 43 of the retaining member 4, i.e. notch 35 is shaped such that the deapest point of the notch is oriented somewhat in an upward direction so that the stopper projection 43 of the retaining member is locked to prevent the retaining member 4 from coming out.

According to the construction thus far described, the retaining member 4 can be brought into engagement with 30 crutch body arm 32 merely by being pushed downwardly. To release this engagement the tongue 44 must be manually pushed upward to disengage the locking projection 43 from the notch 35. Thus, the engagement or disengagement between the outer crutch body arm 32 and the retaining 35 member 4 can be effected by a single action.

Moreover, since the retaining member 4 elastically urges

- the crutch body 30, there engagement can be improved to prevent any idle movement which probably might create rattling. Furthermore, since the stopper projection 43 is constructed to have its upper side abutting against the upper side of the notch 35, there is no risk that the engaging portions are disengaged when the oar comes into contact with the crutch arms and the retaining member.
- 10 As shown in Fig. 3, furthermore, if the crutch arm 32 has its leading end 34 formed into a curved shape and its centre surface portion formed with a guide groove 36 for the leading end portion 42 neighbouring said stopper projection 43, the engagement or disengagement of the retaining member 4 can be effected with more ease.

Incidentally, the present invention may be modified such that the stopper projection is formed at the leading end 34 of crutch arm 32 whereas the notch for locking said stopper projection may be provided at the leading end portion 42 of the retaining member.

As has been described hereinbefore, according to the oar crutch of the present invention, the engagement or disengagement between the crutch body and the retaining member can be effected by a single action. As a result, the attaching or detaching of the oar can be performed with ease within a very short period of time so that there is no risk of the boat losing its balance.

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An example of the prior art oar crutch is shown in Fig. 4. The oar crutch is shown to be provided with a retaining member 52 which is hinged to an inner crutch arm. The outer crutch arm is provided in its upper end portion with a slit 53 into which the leading end portion of the retaining member 52 can be inserted.

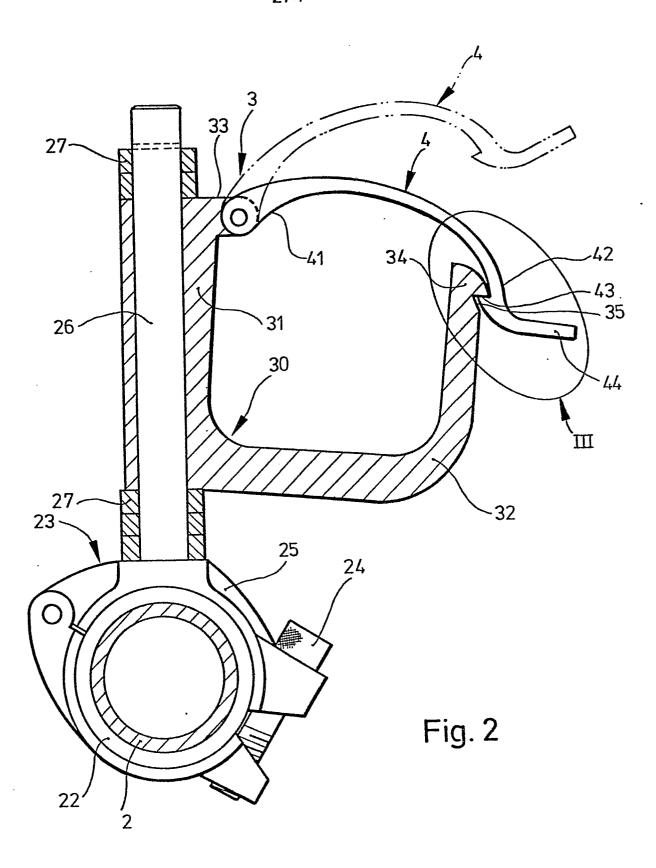
An engaging member 54, which is screwed into that leading end portion, can be screwed into the slit 33 thereby effecting the engagement between the oar crutch and the retaining member. For disengaging the retaining member

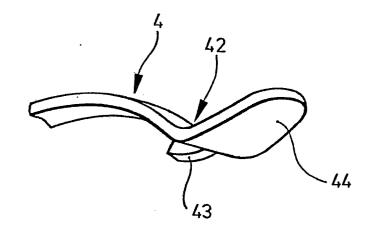
5 it is necessary to screw back the engaging member 54.

1 CLAIMS:

- An oar crutch for row boats of the type comprising a generally U-shaped crutch body having an inner 5 arm (31) and an outer arm (32) as well as comprising a retaining member (4) for connecting the ends of said inner and outer arms, one end of said retaining member being hinged to the end portion (33) of the inner arm (31), and the leading end portion (42) of said retaining 10 member (4) being engageable with the end portion (34) of said outer arm (32), c.h a c t e r i z e d in that said retaining member (4) is made of an elastic material and has its leading end portion (42) bent downwardly to elastically urge said end portion (34) of the outer arm 15 (32) and in that said leading end portion (42) of said retaining member (4) and the associated end portion (34) of said outer arm (32) are provided with a stopper projection (43) and a notch (35) respectively.
- 20 2. Oar crutch as set forth in claim 1, characterized in that said notch (35) is formed in the outer side of said end portion (34) of the outer crutch body arm (32) and that said stopper projection (43) is formed in the retaining member surface which faces said end portion (34).
- 3. Oar crutch as at first in claim 2 characterized in that the leading end portion (42) of the retaining member (4) is provided with a tongue (44) leading
 30 horizontally from said stoppper projection (43).
- 4. Oar crutch according to one of claims 1 3, characterized in that there is provided a guiding groove (36) in the outer surface of the end portion (34) of said outer arm (32), for receiving said leading end portion (42).

Fig. 1





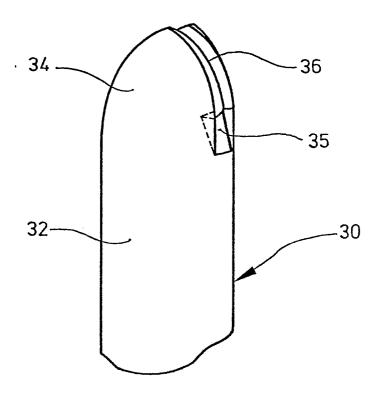


Fig. 3

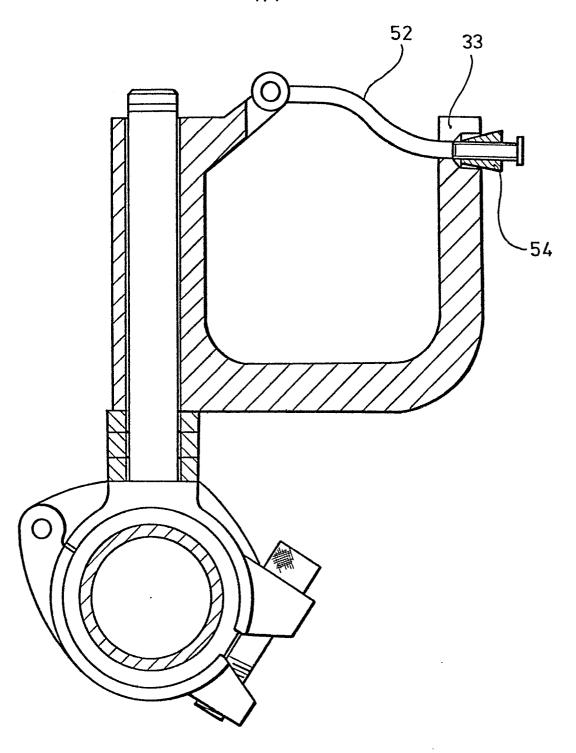


Fig. 4