E. J. KERNS.

OAR.

APPLICATION FILED NOV. 22, 1913.

1,107,169.

Patented Aug. 11, 1914.

Fig. 1.

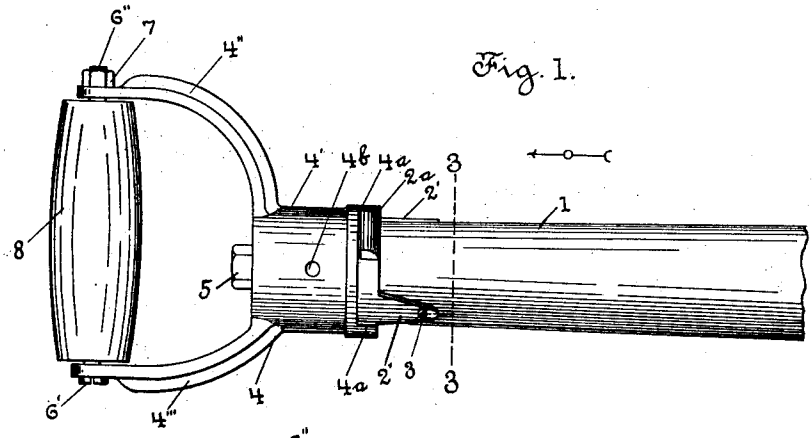


Fig. 2.

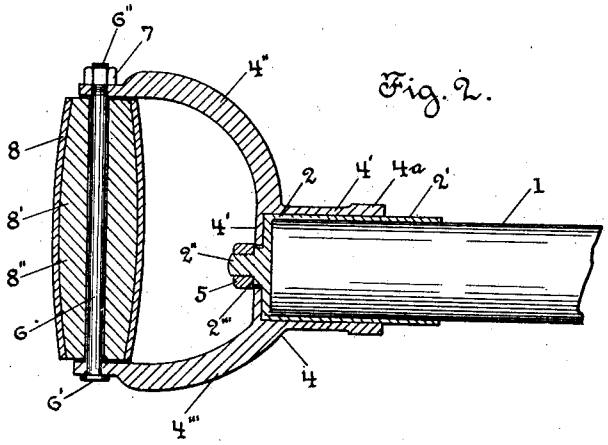


Fig. 3.

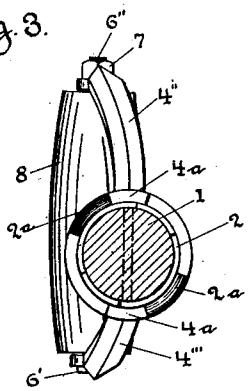
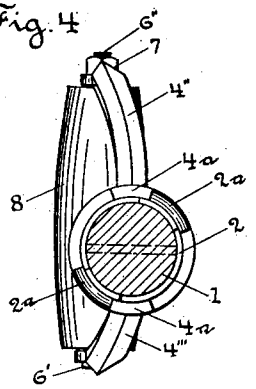


Fig. 4



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UNITED STATES PATENT OFFICE.

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OAR.

1,107,169. Specification of Letters Patent. Patented Aug. 11, 1914.

Application filed November 22, 1913. Serial No. 802,399.

To all whom it may concern:

Be it known that I, EDWARD J. KERNS, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Oars, of which the following is a specification.

My invention relates to oars, and particularly to that type of oar termed a sweep, or two-armed oar.

The object of my invention is to improve upon the ordinary construction of a sweep oar, and more particularly to combine with the inner wood end of the oar, a handle, or grip, made separate, and grasped and held by one hand of the rower, while the other hand is on the wood end. The handle or grip is preferably attached to the inner wood end of the oar in such a manner, that the wood portion will turn, relatively to the handle or grip, in "feathering" the oar, the handle or grip always remaining in a vertical plane, and the hand of the rower grasping said handle, also being in a vertical plane, in the direction of the width of the hand. By means of my supplemental handle on the oar, the rower is enabled to get a longer leverage of the oar, and a more powerful stroke, the hand grasping the handle always remaining in a vertical position, relative to the oar proper, without regard to the turning or rotary movement of the oar by the movement of the other hand, in the operation of "feathering" the oar.

My invention consists in certain novel features of construction of my improved oar as will be hereinafter fully described.

Referring to the drawing:—Figure 1 is a side view of the inner end of a sweep oar embodying my improvements. Fig. 2 is a central vertical section through the parts shown in Fig. 1. Fig. 3 is a section, on line 3, 3, Fig. 1, looking in the direction of arrow *a*, same figure. Fig. 4 corresponds to Fig. 3, but shows the oar proper in its opposite rotary position.

In the accompanying drawing, 1 is the inner end, or hand portion of a sweep, or two handed oar, said portion is made of wood, and is preferably circular in cross section, in the usual way. On the end of the hand portion 1 is secured a cap or shell 2, preferably of metal. The cap 2 has in this instance two inwardly extending lugs or ears 2′, to receive attaching screws 3, one of which is shown in Fig. 1, to rigidly secure the cap 2 to the end of the hand portion 1 of the oar. The cap 2 has on its outer end and preferably integral therewith a threaded stud 2″, which has a shoulder 2‴. Combined with the end of the hand portion 1, and in this instance with the cap 2, secured thereon, is my supplemental handle or grip 4. The handle 4 has in this instance a sleeve 4′ thereon, which in this instance fits loosely over the cap 3, and has a hole therein to receive the stud 2″. A nut 5 is screwed on to the threaded end of the stud 2″, and secures the sleeve 4 to the cap 2, to turn loosely thereon. The hand portion 1, with the cap 2 thereon, is free, in this instance, to turn within the sleeve 4′ on the handle 4, as the oar is partially rotated by the hand grasping the hand portion 1, in "feathering" the oar.

The handle 4 has the upwardly and outwardly curved arm 4″, and the downward and outwardly curved arm 4‴, which preferably has less curvature than the arm 4″, as shown. The ends of the arms 4″ and 4‴, carry a pintle 6, which in this instance has a screw head 6′ on one end, and a screw thread 6″ on the other end, which screws into a threaded hole in the arm 4″. A nut 7 is screwed on to the end of the pintle 6. On the pintle 6 is loosely mounted to extend in a vertical direction, the barrel 8, forming the hand portion or grip of the handle 4. The handle 4, having the arms 4″ and 4‴, is of yoke shape, and connected at the ends of said arms by the barrel or grip 8. The grip 8 may have a central part 8′, covered by rubber or other suitable material 8″.

On the cap 2 are in this instance two projections 2^a, upon opposite sides of said cap, and extending out radially therefrom. On the sleeve 4′ are two projections 4^a, extending inwardly, and in the path of the projections 2^a. The projections 2^a on the cap 2, in connection with the projections 4^a, on the handle 4, limit the rotary movement of the hand portion 1, within the sleeve 4′ on the handle 4. The opening 4^b in the sleeve 4 is an oil hole for lubricating the cap 2, when desired.

It will be understood that the details of construction of my improved oar may be varied if desired.

My supplemental or handle grip is rotatably mounted directly on the handle end of the wood portion of the oar, so that the

wood portion is rotatable in the operation of rowing, independent of the supplemental handle or grip, which may be held in a stationary position, with the handle or grip proper extending in a vertical plane, during the operation of rowing and the feathering of the oar.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. The combination with the handle end of an oar, of a handle or grip made separate therefrom, and having a sleeve thereon, fitting loosely over and rotatably mounted on a cap on the handle end of the oar, and having a yoke shaped end extending out from said sleeve, and a barrel, forming the handle portion, supported in said yoke shaped end, to allow of the rotary movement of said oar, independent of said handle or grip, in the operation of rowing.

2. The combination with the handle end of an oar, of a handle or grip, made separate therefrom, and having a sleeve thereon, fitting loosely over and rotatably mounted on a cap on the handle end of the oar, and having a yoke shaped end extending out from said sleeve, and a barrel, forming the handle portion, supported in said yoke shaped end, to allow of the rotary movement of said oar independent of said handle or grip in the operation of rowing, and means for limiting the rotary movement.

3. The combination with the handle end of an oar, of a handle or grip rotatably mounted thereon and adapted to extend in a vertical plane in the operation of rowing, and means for limiting its rotary movement.

4. The combination with the handle end of an oar, of a handle or grip of yoke shape, rotatably mounted thereon, and adapted to extend in a vertical plane in the operation of rowing, and means for limiting its rotary movement.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."