





# UNITED STATES PATENT OFFICE.

JOSEPH P. MCFARLAND, OF BALTIMORE, MARYLAND.

## BOW-FACING OAR.

SPECIFICATION forming part of Letters Patent No. 538,081, dated April 23, 1895.

Application filed January 25, 1895. Serial No. 536,245. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH P. MCFARLAND, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Boat-Oars, of which the following is a specification.

This invention relates to an improvement in the construction of oars for boats.

The invention will first be described and then pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view of an oar having my improvements. Fig. 2 is a plan view showing the double joint of the oar. In this view the top plate is removed. Fig. 3 is a longitudinal section of the joint of the oar. Fig. 4 is a plan view of the bottom plate of the oar-joint. Fig. 5 is a side view of one of the clips, showing the square hole. Fig. 6 is a perspective view of the clamp and pivot-bolt. Fig. 7 is a view of the pivot-bolt.

The letter, A, designates the blade and, A', the handle of the oar. Each of these has a circular-shaped joint-head, b, b', of the same size. A central hole, c, is in each joint-head and the two joint-heads are united or connected by two wire cords, d, in the shape of the letter, S, each having one of its ends attached to a different one of the circular rims of the heads by screws, e, these two cords being in reversed position and crossing each other between the adjoining parts of the said rims. The bottom plate, F, in the present instance, is made in two parts or sections, 1 and 2, so as to clamp above and below the pivot-bolt, m,—a half-round cross groove, h, being in each of the two parts for said bolt. The top section, 1, of said plate, F, has on its upper surface two pivot bosses, c', and a central hole, g, is through each. The lower section, 2, fits flat against the top section. The joint-heads, b, b', are seated on the top of the upper section of plate, F, the bosses, c', of which take into the central holes, c. Thus each boss, c', serves as a pivot on which one of the joint-heads turns. A cover-plate, H, has position upon the two bosses and covers the two joint-heads and a bolt, i, passes through two sections of the plate, F, and through the hole, g, in each boss and through the cover-plate, H, and is secured by a nut, i'. The two bolts,

i, thus confine all the parts together, but the bolts do not act as pivots for the joint-heads,—the bosses, c', being the pivots as already stated.

It will thus be seen that the two joint-heads, b, b', of the oar connected as described by the reverse cords, d, are pivoted between the bottom plate, F, and cover plate, H. When the handle, A', of the oar is moved in one direction by turning on its pivot, the effect of the two boss pivots, c', and the reversely-crossed cords, d, is to turn the blade, A, of the oar on its pivot in the same direction as the handle.

Suitable means must be employed to enable the oar to be oscillated with respect to the gunwale of the boat. The means for this purpose shown, in the present instance, will now be described.

The clamp which holds the pivot-bolt, m, comprises two clips, J, each having two prongs, k, which take over the gunwale of the boat—saddle-fashion, and a set-screw, p, in one prong has on its end a turn-button, q, which bears against the side of the gunwale and said screw and the other prong serves as a clamp. These two clips are united at their tops by a horizontal pivot-bolt, m, which has two collars, n, one near each end and forming a central pivot-part which is clamped by the plate, F. It will be seen the two collars—one at each side of the plate, F—prevent any binding on said plate. At one end of the bolt is a squared part, m', and a nut, m<sup>2</sup>, and at the other end is a nut, m<sup>3</sup>. The squared part, m', of the bolt fits in the square hole, o, in one of the clips and thus the bolt is prevented from turning and the two nuts take on the screw-threaded ends of the bolt which project outside of the clips.

With this oar a person in a boat may sit facing the bow of the boat, or facing in the direction the boat is moving.

This oar may be used for rowing or sculling.

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

1. A boat oar having, in combination, a handle and blade each being a separate piece and each having a circular joint-head provided with a central hole, c; a plate, F, provided on its surface with two integral bosses, c', each having a hole, g—said bosses taking into the



said central holes of the joint-heads and serving as the pivots on which the handle and blade turn; a plate, H, covering said joint-heads and resting against said pivot-bosses; bolts, *i*, through the said cover plate and the holes in the pivot-bosses and securing the two plates together; means connecting the said joint-heads of the handle and blade so as to insure pivot-movement of both of said parts in the same direction, and means to enable the oar to be oscillated.

2. A boat oar having, in combination, a handle and blade each being a separate piece and each having a circular joint-head provided with a central hole, *c*; a base-plate, F, made in two sections the upper one of which is provided on its upper surface with two integral bosses, *c'*, each boss having a hole, *g*, and said bosses taking into the said central holes of the joint-heads and serving as the pivots on which the handle and blade turn, and said upper section also having on its lower surface a central semi-circular groove, *h*, extending in a direction transversely with respect to the said two bosses,— and the lower plate section having on its upper surface a semi-circular groove corresponding to the said groove in the upper section and forming therewith a circular hole; a plate, H, covering said joint-heads and resting against said pivot-bosses; bolts, *i*, through the cover plate and the two sections of the base plate and securing said three parts together; means connecting the said joint-

heads of the handle and blade so as to insure pivot movement of both of said parts in the same direction; a horizontal pivot-bolt, *m*, through the said transverse hole between the two plate sections; and a clamp at each end of the said bolt to engage the gunwale of a boat, as and for the purpose described.

3. A boat oar having, in combination, a handle and blade each being a separate piece and each having a joint-head connected together so as to afford pivot movement to both of said parts in the same direction; a base plate, F, supporting said joint-heads and made in two sections the upper one of which is provided on its lower surface with a central transverse semi-circular groove, *h*, and the lower plate section having on its upper surface a corresponding groove and thereby forming a circular hole; a plate, H, covering said joint-heads,— the said cover plate, the two sections of the base plate and the joint-heads all secured together by two bolts, *i*; a horizontal pivot-bolt, *m*, through the said transverse hole; and at each end of the said bolt a clamp to engage the gunwale of a boat, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

JOSEPH P. MCFARLAND.

Witnesses:

CHAS. B. MANN, Jr.,

C. CALVERT HINES.