C. LEIDING. OAR LOCK.

(Application filed Feb. 20, 1899.) (No Model.) J. Inventor Witnesses

United States Patent Office.

CHARLES LEIDING, OF DULUTH, MINNESOTA, ASSIGNOR OF ONE-HALF TO HANSON E. SMITH, OF SAME PLACE.

OAR-LOCK.

SPECIFICATION forming part of Letters Patent No. 630,245, dated August 1, 1899.

Application filed February 20, 1899. Serial No. 706, 167. (No model.)

To all whom it may concern:

Be it known that I, CHARLES LEIDING, of Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and 5 useful Improvements in Oar-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention contemplates certain new

and useful improvements in oar-locks.

The object of the invention is to provide an oar-lock which cannot possibly be removed while the oar is pointed toward the water— 15 that is, when pointed other than within or above the gunwale of the boat.

A further object is to provide an oar-lock of this character which will be extremely simple in construction, inexpensive, and free 20 from all springs or other parts liable to readily get out of order; and a further object is to provide an oar-lock of the kind stated which may be easily placed in and removed from position.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation. Fig. 2 is a view at 30 right angles to Fig. 1, showing the oar-lock turned at right angles with its locking-arm opened. Fig. 3 is a central vertical sectional view. Fig. 4 is a top plan view of the lockplate.

Although this oar-lock possesses special advantages when applied to boats commonly known as "gunwales," yet it is applicable to boats having outriggers.

Referring to the drawings, A designates a 40 plate which is formed with a central raised portion a and a depending flange a', which surrounds a hole a^2 , extended centrally through the raised portion. The upper surface of this raised portion forms a cam—that is, it is per-45 fectly flat save at that portion facing the boat, which is concaved, as at a^3 . This plate A in the form shown is designed to be secured on the upper surface of the gunwale of a boat, being held by screws. In this way the 50 strength of the gunwale at the point of strain during rowing is greatly increased.

B designates the oar-lock proper, which is of the usual shape, and from a flange b in its under side projects a spindle b'. This spindle has a spline b^2 , which when the lock is be- 55 ing positioned is passed downwardly through a vertical groove b^3 . When the lock is turned after insertion, the upper end of the spline contacts with the lower face of flange a'.

C designates a locking-arm for holding an 60 oar locked within the lock B. This arm is of approximately C shape and at its lower end is pivoted to lock B by means of a pivot D, passed through ears d' of arm C and a central ear d^2 of lock B. The lower end of 65 this arm when the latter is in its normal position is flush with the flange b. The arm C fits snug against one of the curved branches of the lock B and extends over the space between the ends of the two branches. At its 70 extreme end is a small lug or flange e, by grasping which the arm may be conveniently moved. This locking-arm is always extended over the space between the branches of the lock proper when its lower end is in contact 75 with the flat surface of plate A. Such contact is continuous when the oar is pointing outside of the boat; but when the lock is turned at right angles to the plate, with the lower end of arm C above the concavity 80 therein, said arm may be turned on its pivot and thrown back from across the space between the two curved members of the lock proper. In this position an oar may be inserted into or removed from the lock B. To 85 remove an oar, it is necessary to throw the outer end thereof within the boat or above the gunwale before the locking-arm can be withdrawn from above the branches of the lock proper. The lock must also be placed go in the same position when an oar is to be inserted. When the lock is turned so as to move the lower or inner end of the lockingarm onto the flat surface of the cam-like portion, the arm is at once thrown over the 95 space between the branches of the lock and will be so held during the rowing operation. To remove the lock from the boat, it is only necessary to so turn it that the spline of the spindle will be in line with the groove, where- 100 upon an upward pull will withdraw the lock.

It will be observed that as long as the blade

of an oar is pointed outside of a boat the locking-arm cannot possibly be opened, that in this way the loss of an oar from its lock is impossible, and that it is only when the blade end of an oar is moved within the boat or above the gunwale that the locking-arm can be thrown back out of the way.

It is obvious that my improved oar-lock may be mounted on the outrigger of a boat

ro as well as on the gunwale.

I claim as my invention—

1. An oar-lock having two brances

1. An oar-lock having two branches spaced apart at their upper ends, an arm normally projecting over the space between said branches, and a cam for so holding said arm when the oar-lock is in working position, as set forth.

2. An oar-lock comprising a lock, proper, a pivoted arm carried by said lock and designed to project over the upper part thereof, and a cam-like projection beneath said lock with which said arm is designed to engage, substantially as set forth.

3. The combination with a plate having a cam-like surface, of an oar-lock axially mounted and movable above said surface, and a locking-arm carried by said oar-lock and

designed to engage said cam-like surface, as set forth.

4. The combination with a plate having 30 an opening and an upper cam-like surface surrounding said opening, of a lock having a spindle fitted in said opening, and a pivoted curved arm carried by said lock, adjacent to said cam-like surface, said arm en-35 compassing part of said lock, and having its lower end in contact with said cam-like surface, substantially as set forth.

5. The combination with a plate having an opening, an upper cam-like surface and a 40 lower flange, of a lock having a spindle provided with a spline, and a pivoted curved arm carried by said lock and having its lower end in contact with said cam-like surface, said arm being curved throughout its length, 45

substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHAS. LEIDING.

Witnesses:
JAMES P. SMITH,

C. M. LAUERMANN.