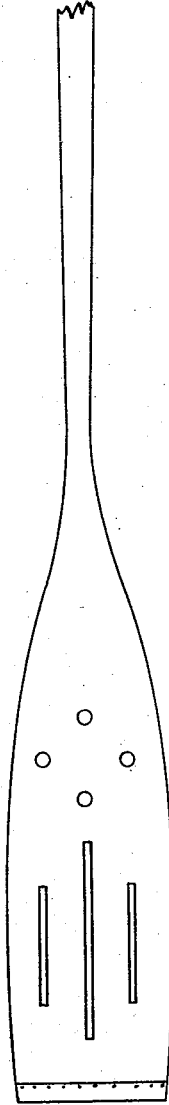


(No Model.)

R. McMANUS.
Oar.

No. 230,314.

Patented July 20, 1880.



WITNESSES.

Lawrence W. Keeler
Warren A. Reed

INVENTOR.

Richard McManus
by Charles D. Reed
Attorney

UNITED STATES PATENT OFFICE.

RICHARD McMANUS, OF BOSTON, MASSACHUSETTS.

OAR.

SPECIFICATION forming part of Letters Patent No. 230,314, dated July 20, 1880.

Application filed May 31, 1880. (No model.)

To all whom it may concern:

Be it known that I, RICHARD McMANUS, of Boston, in the State of Massachusetts, have invented an Improved Oar, of which the following is a specification.

I have represented in the drawing a blade of an oar containing my invention.

It is well known to oarsmen that when the oar in rowing first strikes the water there is a considerable jar or shock, to overcome which the oarsman must exert more strength than would otherwise be necessary. To overcome this I place in the blade of the oar a number of holes; or instead of the holes slots or square openings, or both, may be used. I make the blade of the oar longer and wider, so as to present the same amount of surface for the propulsion of the boat as the blade of the oar has when made in the ordinary way.

It will be found that my oar, in addition to the advantage above spoken of which it possesses, has also another, in that in removing it from the water, instead of the water being lifted up to some extent by the oar at the end of the stroke, the water which is above the blade all escapes through the holes and slots.

In the drawing I have represented an oar made with holes and slots, as above described.

What I claim is—

An oar with a perforated blade, substantially as and for the purpose above described.

RICHARD McMANUS.

Witnesses:

GEORGE H. HOSMER.

CHAS. H. DREW.