

(No Model.)

M. F. DAVIS.
OAR.

No. 540,581.

Patented June 4, 1895.

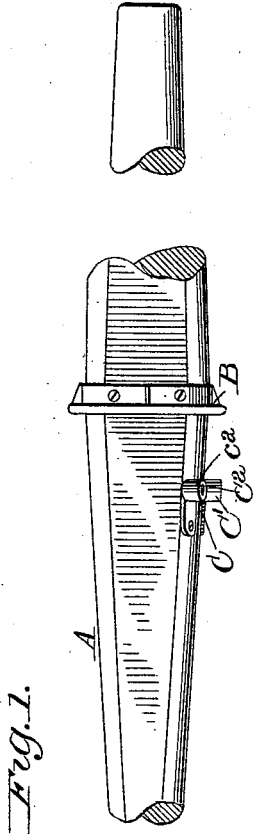
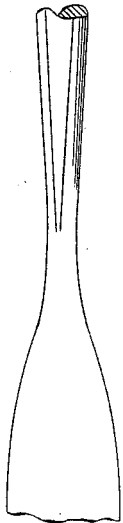


Fig. 1.



Witnesses
 Arthur Kohler
 Ch. Darby

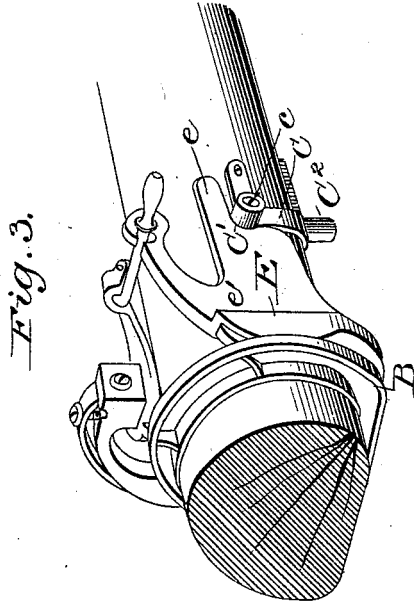


Fig. 3.

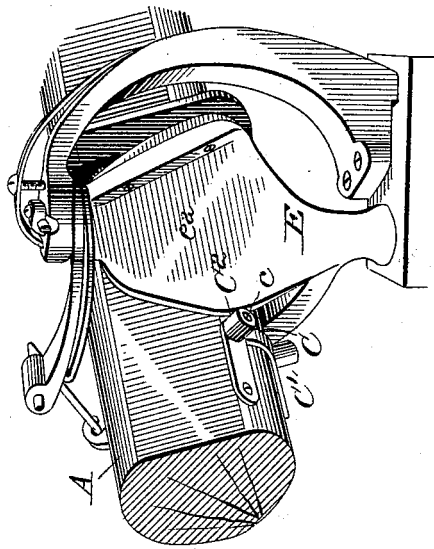


Fig. 2.

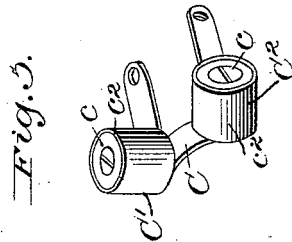


Fig. 5.

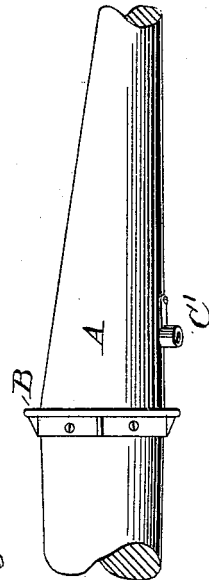


Fig. 4.



Inventor
 Michael F. Davis
 by L. Deane & Son.
 Attorneys

UNITED STATES PATENT OFFICE.

MICHAEL F. DAVIS, OF DETROIT, MICHIGAN.

OAR.

SPECIFICATION forming part of Letters Patent No. 540,581, dated June 4, 1895.

Application filed March 30, 1895. Serial No. 543,864. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL F. DAVIS, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Oars; 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.

In the accompanying drawings, Figure 1 is an elevation of the loom of an oar or sweep having present invention. Fig. 2 is a perspective view of the rowlock-section of an oar or loom to which my invention is applied, the oar being on the pull. Fig. 3 is a perspective view of the rowlock-section of this oar or sweep as in position in a rowlock, the oar being on the feather. Fig. 4 is a perspective view of the oar or sweep, showing the same on the feather. Fig. 5 is a detail view of the projection or stud forming the stop.

This invention relates to improvements in oars or sweeps on which a collar or button is used on the inboard part of the row lock section to come in contact with the inner face of the row lock, and the novelty in the present instance consists in providing on the loom of the oar or sweep, or its row lock section, studs, projections or stops on its body at such distance from the said collar that in use it will be located outside of the lock, the row lock pins coming between the button or collar and stop. The use and advantage of the stud, projection, or stop in connection with the collar and the row lock are that the oar or sweep can be held fixed or rigid on the feather, and thus enable the oarsman to avoid any disadvantage in the way of the wind striking against the blade of the oar or sweep. This action of the wind in striking the blade of the oar or sweep as heretofore made has tended greatly to lessen the speed of the boat as the wind naturally impinging against the blade of the oar or sweep tended to turn the blade against the wind and greatly retard the speed of the boat; but by my invention the oar or sweep being placed and held in fixed position on the feather, that is, with its blade parallel to the water line, the wind having then no surface, or but the slightest, to act on passes harmlessly by, as it cannot turn the blade so

as to expose its surface perpendicularly to the wind. Not only is the above true in regard to the action of the wind on the blade of the oar or sweep, but in a similar degree is true of the action of the water. It will also be very plain to every one skilled in these matters that by thus almost entirely preventing the impingement of the wind and water on the oar or sweep blade, there will certainly be very much less expenditure of the oarsman's power, as he does not need to exert any in holding the oar or sweep so as to resist the action of wind or water upon it; all this being accomplished by the fixed position of the oar or sweep on the feather as has been above explained.

In the accompanying drawings A denotes this oar or sweep, which, except so far as my invention is applied, may be of any ordinary or usual construction. On the row lock section is secured the collar or button B, which also may be of any ordinary structure. At a slight remove from the collar and outwardly on this section and so as to come in suitable position for the uses in connection with the row lock, to be hereinafter explained, are fixed the studs, projections, or stops, C', C². Each stud, projection or stop is made in any desirable way, but a preferable structure is to have an upwardly projecting pin or screw c attached or fixed in a frame C, which is securely fastened to the loom of the oar, the pin and frame being made of metal. About the pin or screw c is the non-metallic and preferably rotatable sleeve c² which is held in place by the head of the pin or screw. As thus made the oar or sweep is applied in the oar lock E, so that the collar or button B comes on the inboard side of the lock, and the studs, projections or stops on the outside one C' adapted to act on the outwardly extending stop or projection e, of the upright e' of the row lock when the oar is on the feather, and the other C² on the upright e² of the lock when the oar is on the pull. As thus applied to and used in the lock, the oar or sweep is free for all the usual or desired movements in rowing, &c., but when the oar or sweep is on the feather, since the collar or button comes against the row lock upright, the oar or sweep will be held fixed with its blade in an edge-wise position, so that the wind or water will

have no appreciable surface to act upon, and will go harmlessly past the same. This is a matter of very large importance, as every oarsman knows full well, and by thus removing surface from the action of the wind or water there is a very considerable salvage in the expenditure of the oarsman's strength.

Prior to my invention not only did the wind or water tend to act against the blade of the oar or sweep so as to throw it up at right angles more or less, with the wind or water, but in order to prevent this harmful action and keep the oar or sweep edgewise to the wind or water the oarsman was obliged to exert very considerable power to his evident loss of force and serious danger in the meantime by the additional loss through mental strains.

So far as I know, after a very considerable experience in this class of invention, no means thus far have been devised which will accomplish mechanically the objects I have now in view. The covering of the pin or screw being non-metallic prevents any click or noise in its use, and being rotatable can be turned round to take up wear.

The projections, studs, or stops C' C² have each incidentally other functions in use, such as stopping the inboard movement of the oar or sweep by impinging against the outboard side of the row lock.

While for the purpose of clearly illustrating my invention I have shown a collar or button on the oar adapted to come on the inside of the row lock and an outwardly extending arm from the row lock, and a stud, pin, projection or stop on the oar adapted to come in contact with the said arm, it will be plain to all skilled in the art that in the mere matter of structural detail many changes can be made without in the least departing from the aim and scope of my invention, the essential ideas of which are providing on the oar substantially a collar, button or equivalent means to engage upon the inboard face of the row lock, and also a pin, stud, projection or stop on the oar loom to engage on some part outwardly projecting from the row lock.

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

1. The combination with a row lock, having the usual uprights and an outward extending projection on the outboard portion of one, of an oar provided with a collar on the inboard portion of the row lock section and studs or stops on the outward portion, adapted to engage respectively with the outwardly ex-

tending projection of one upright and the outer face of the other, substantially as described.

2. The combination with an open row lock having an outward projection or stop, of the oar having a collar on its inboard portion, and a projection on its outboard portion adapted to engage with said outwardly extending stop or projection, substantially as described.

3. The combination with a row lock having the usual uprights and an outwardly projecting stop on one of the uprights thereof, of an oar having on its row lock section studs or projections on the outward portion, each provided with a non-metallic cover rotatable thereon, and adapted to engage respectively with said uprights, substantially as described.

4. The oar or sweep having on its loom the collar B and pins, stops, or projections c', c², combined with the row lock E, whereby the collar permits the outer movement of the oar or sweep and the pins, stops, or projections the inner movement respectively on the feather and on the pull, substantially as described.

5. The above described oar having on its row lock section a collar or button and at a slight distance outwardly from this, and entirely unconnected with it, stops, studs or projections adapted to engage with the uprights of a row lock, substantially as and for the purpose set forth.

6. In a rowing apparatus, a standard secured on the gunwale of the boat, and an open upright oar lock pivoted therein, said oar lock having a projection on its outboard face, the oar provided with a collar on its inboard portion and having studs or stops on the outboard portion, and adapted to engage respectively with the outwardly extending projection of one upright of the oar lock, and with the outer face of the other upright, substantially as described.

7. The combination with an open rowlock having a projection on its outboard face, of an oar having a collar on its inboard portion, and a projection on its outboard portion adapted to engage with the said outwardly extending projections of the oar-lock, substantially as described.

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

MICHAEL F. DAVIS.

Witnesses:

H. M. STERLING,
L. DEANE.