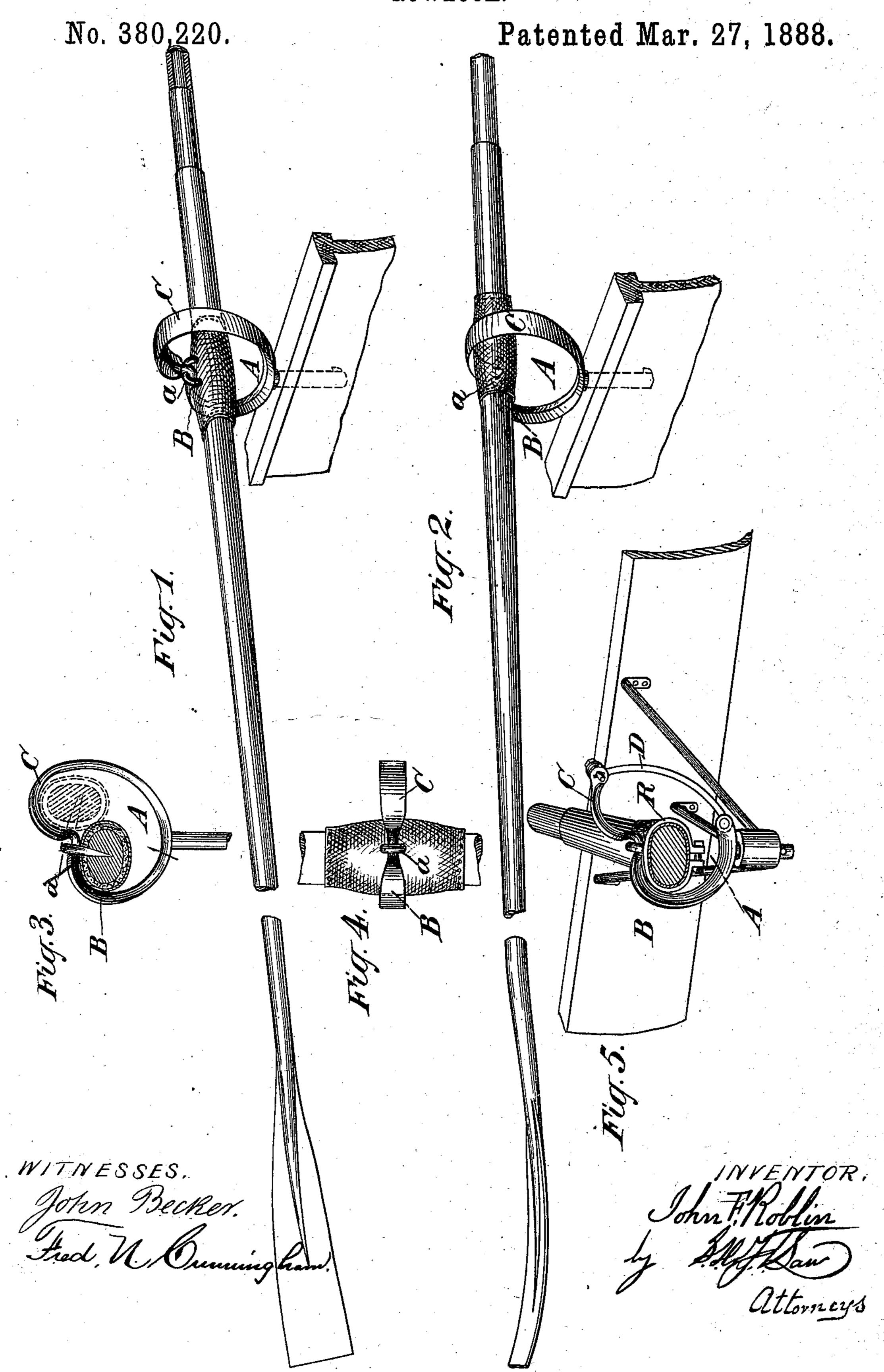
J. F. ROBLIN.
ROWLOCK.



## United States Patent Office.

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## ROWLOCK.

SPECIFICATION forming part of Letters Patent No. 380,220, dated March 27, 1888.

Application filed July 7, 1887. Serial No. 243,607. (No model.)

To all whom it may concern:

Be it known that I, John Franklin Rob-LIN, of the city of Belleville, county of Hastings, Province of Ontario, Canada, have in-5 vented a certain new and useful Improvement in Rowlocks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making

part of this specification.

10 My improvement belongs to that class of rowlocks in which the lock is permanently attached to the oar and is connected to the boat by a pin fitting in a hole or socket in the gunwale of the boat; and is intended to produce a rowlock 15 that will guide the oar or hold it in the correct position for propelling the boat and for feathering the oar on the return-stroke, and that will also prevent the edge of the blade from catching in the water, so as to cause a 20 "crab."

In the drawings illustrating my invention, in which like letters indicate like parts, Figure 1 is a view of my improved rowlock with the oar in the position of rowing or propelling 25 the boat. Fig. 2 is the same as Fig. 1 with the oar in the position of feathering. Fig. 3 is a sectional view of the improved lock, showing the oar in the position of rowing, and in dotted lines in the position of feathering. Fig. 3c 4 is a top view of the rowlock with the oar resting in the lock when not in use. Fig. 5 shows a modified construction of the lock connected

to an outrigger and open on one side. My improved rowlock consists, essentially, 35 of a ring, A, of irregular shape, surrounding the oar and provided with a pin, P, on the lower side for connecting the lock with the boat in the usual manner, and from the top of which the oar is suspended by a staple, gener-40 ally driven into the oar and fitting over the rowlock, so the oar can swing or freely turn in the lock in rowing. The ring A is formed with two curves, B and C, on the top and on one side of the same, of particular form and 45 contour. The front side, B, of the lock when in position on the boat is curved from the point a of suspension of the oar, so as to fit the

in rowing. The ring A on the other side of 50 the point of suspension a is curved upward, as shown at C, so as to fit the oar when turned in the position for feathering.

loom of the oar and form a brace for the same

The oar is suspended from the top of the rowlock by means of the staple in such a position that when not in use or resting in the lock 55 the blade of the oar will rest or float on the surface of the water. In this position the oar does not touch or come in contact with either side of the lock, but may be brought against either one of the curves B and C by merely turning the 60 handle of the oar. These curves Band C, therefore, are so shaped and arranged with reference to each other and to the point of suspension of the oar and to the size and shape of the loom of the oar, or that part of the latter within 65 the rowlock, that when the oar is turned against the side or curve B of the lock, as shown in Fig. 3, the oar will be in the correct position for rowing, or with the blade perpendicular or at right angles to the surface of the 70 water, as will be seen from Fig. 1, and when turned against the upper curve, C, as shown in dotted lines in Fig. 3, the oar will be in the correct position for feathering on the returnstroke, or with the blade nearly parallel with 75 the surface of the water, with the front edge slightly raised, as will be seen in Fig. 2. The curves therefore form the bearings for the oar when rowing and when feathering, and are so shaped and situated as to keep the oar in the 80 right position to perform these results, and, moreover, prevent the oar from being turned, so as to interfere with these correct positions.

As the oar is suspended from the rowlock, and consequently attached to the latter, the 85 blade is always kept at the proper distance from the boat to attain the best results in rowing, and, furthermore, as the oar is suspended or fastened to the top of the lock, it can only turn a limited distance before coming in con- 90 tact with the sides of the ring A, and when once against the sides of the ring is prevented from turning any farther in the same direction. Consequently, when the oar is turned so as to bring it against the curve B, the oar is not os only placed in the correct position for rowing. but is held or prevented from being turned out of this position; hence when rowing the blade is always perpendicular in the water and the full effect of the oar obtained, and for the same 130 reason when the oar is turned so as to bring the loom against the upper curve, C, the oar is not only placed in the proper position for feathering, but is held in this position and can380,220

not be turned so as to interfere with the feathering, or so as to turn the blade in the water and cause the front edge to dip or catch in the water. With my improved rowlock, there-5 fore, any one, no matter how unskilled in rowing, will hold the oar in a proper position in rowing, and will feather the oar in a scientific manner, and, moreover, cannot by any means so hold the oar as to catch it in the water, or,

to as it is termed, "catch a crab."

The oar itself will assume the position for feathering, and hence it is not necessary that the oar should be turned by the hand of the oarsman. The end of the oar may, therefore, 15 be provided with a ferrule or handle (shown at H, Fig. 1) which turns on a socket. This can be grasped by the oarsman as he rows and feathers his oar, and obviates the necessity of the oar turning in the hand and blistering the 20 hand. As the oarsman grasps the handle H loosely in his hand and pulls the oar, the blade, owing to the curve B of the rowlock, takes the correct position for rowing, and by merely pushing the oar back on the return-25 stroke the oar itself is guided and held in the right position for feathering without being turned by the oarsman.

In the particular construction shown in the drawings the oar is suspended by a staple or 30 ring attached to the oar and fitting over the top of the ring A. The ring A where encircled by the staple is contracted or made smaller than the rest of the ring, as shown more particularly at a in Fig. 4, so the oar is 35 held at the point between the curves B and C and is prevented from sliding on the ring. Any other suitable method of suspending the oar from the ring A may be employed, and instead of driving the staple into the wood of to the oar, as shown in Figs. 1, 2, and 3, the staple may be attached to a ring or band which encircles the oar and is secured to the latter by screws or bolts, as will be seen at R in Fig. 5.

Fig. 5 illustrates my improved rowlock applied to an outrigger where the lock is permanently fastened to the outrigger and the oar is movable therefrom. In this form of construction one side of the rowlock opposite to 50 the curve B is open, so as to enable the oar to be placed in the lock, and the oar is provided with a hook driven into the same or attached to the band R, instead of the staple, before mentioned, by which it is suspended from the 55 ring A. When the oar is placed in the rowlock, a swinging rod, D, is fastened to the upper end of the lock in order to steady and hold the same in the process of rowing; but as the only pressure on the lock is on the side B the to rowlock can readily be made strong enough, when constructed with an open side, to stand

all necessary strain.

My improved rowlock can readily be attached to any boat and without injuring the latter, and can be used with any oar, it being 65 only necessary to adapt the size of the loom of the oar to that of the ring, so the oar willfit the curves B and C when the blades are in the proper positions for rowing and feathering, and when the staple or hook is fastened to the 70 oar by means of the band R the oar is not injured or weakened by anything being driven into or through it.

By the use of my improved rowlock rowing is simplified and rendered more easy, as the 75 oar is always guided and held in the correct positions, and thus after a time any one using my rowlock will become skilled in the use of the oar and enabled to hold it and row in a

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proper manner.

My rowlock does not interfere with any of the usual and necessary movements of the oar in the water—such as backing water and sculling—and the oar may be raised from the water at any point of the stroke, and the lock may 85 be used with a long oar where the oarsman stands and pushes the oar through the water the same as when the oar is pulled in the usual manner.

What I claim is—

1. A rowlock having the oar suspended from the top of the lock and provided with the curve B on one side of the point of suspension adapted to guide and hold the oar in rowing, and with the curve C above and on the other 95 side of the point of suspension adapted to guide and hold the oar in feathering, substantially as set forth.

2. In a rowleck, the combination, with the lock provided with the curves B and C, con- 100 structed and adapted to guide and hold the oar in the position of rowing and feathering, of the oar suspended from the lock between the curves B and C and arranged to move in the lock so as to fit in and rest against the curves 105 in rowing and feathering, substantially as set

forth.

3. In a rowlock, the combination, with the lock provided with the curves B and C, constructed and adapted to guide and hold the 110 oar in the position of rowing and feathering, of the oar provided with the ferrule H, for the purpose described, and suspended from the lock between the curves B and C, and arranged to move in the lock so as to fit in and 115 rest against the curves in rowing and feathering, substantially as set forth.

In testimony of which I hereto sign my name this 2d day of June, A. D. 1887.

JOHN F. ROBLIN.

Witnesses:

J. PARKER THOMAS, G. J. JALKNIER.