

T. C. LUCE.

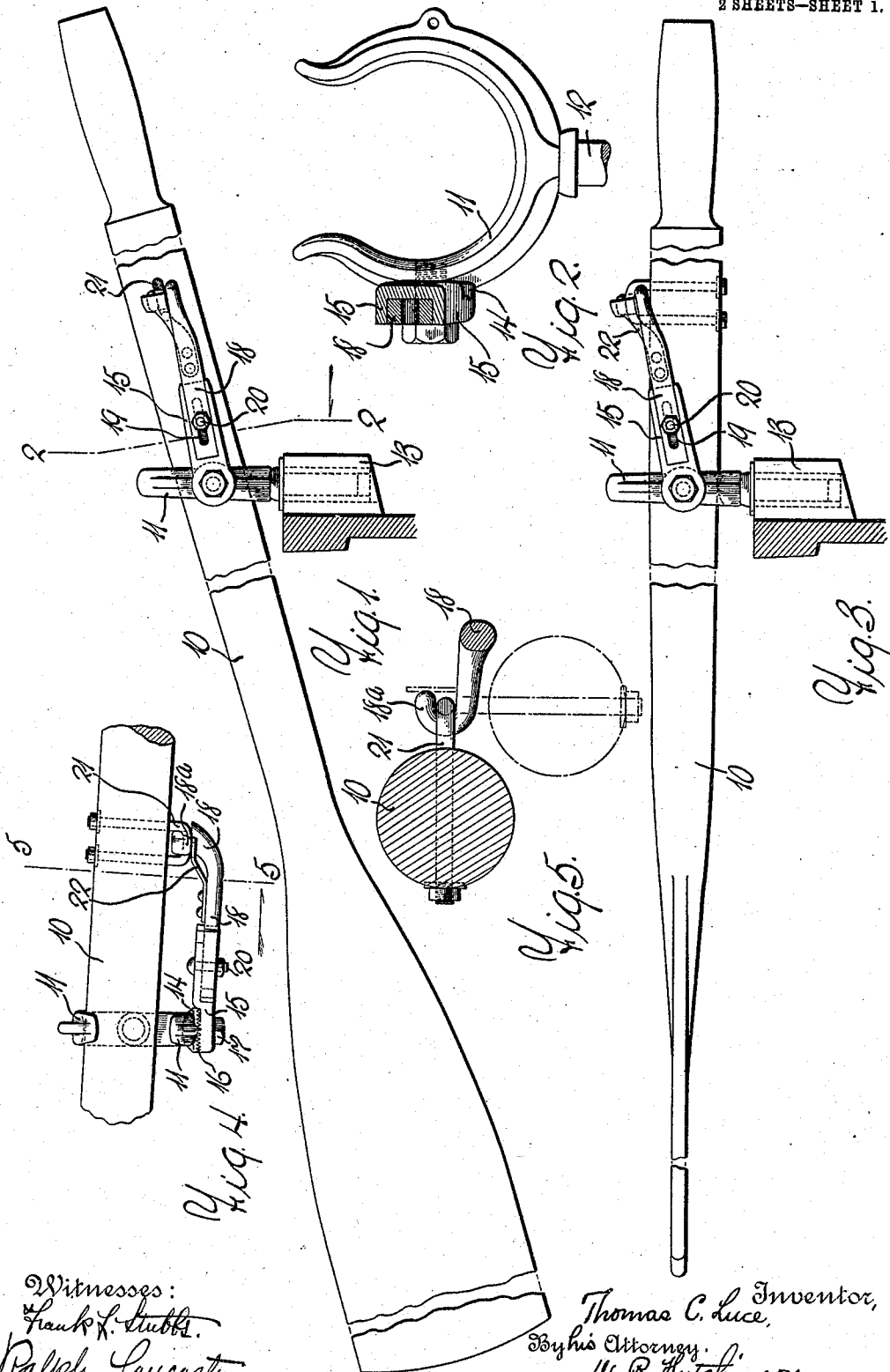
OAR LOCK.

APPLICATION FILED NOV. 14, 1908.

937,004.

Patented Oct. 12, 1909.

2 SHEETS—SHEET 1.



Witnesses:
Frank L. Trubbs.
Ralph Lancaster.

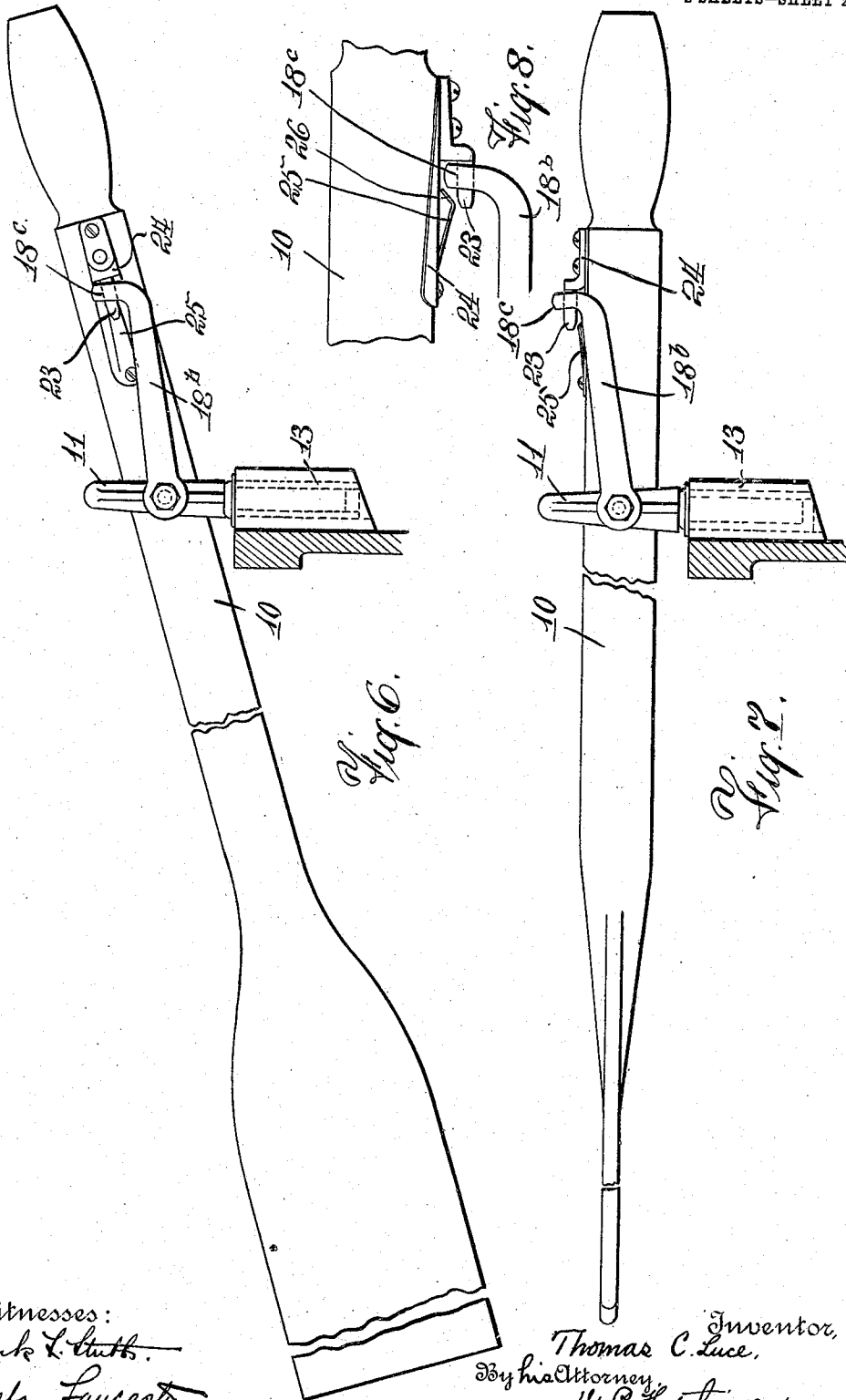
Thomas C. Luce, Inventor,
By his Attorney,
W. B. Hutchinson.

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Witnesses:
 Frank L. Smith.
 Ralph Lancaster.

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UNITED STATES PATENT OFFICE.

THOMAS C. LUCE, OF DALTON, MASSACHUSETTS.

OAR-LOCK.

937,004.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed November 14, 1908. Serial No. 462,564.

To all whom it may concern:

Be it known that I, THOMAS C. LUCE, of Dalton, Berkshire county, Massachusetts, have invented a new and useful Improvement in Oar-Locks, of which the following is a full, clear, and exact description.

My invention relates to improvements in oar locks and the objects of my invention are to improve the construction of oar locks and the connection between the oar lock and its oar, so that the oar will be automatically feathered when used in the natural way, and further to provide an oar lock that will give a uniform and correct depth to each stroke of the oar, and also provide an oar lock that will prevent the oar from drifting away.

A further object of my invention is to attain these results in a manner and by means of mechanism which can be adapted to various forms of oar locks and oars, and still further to construct the device in such a way that it will be simple and inexpensive and can be readily adjusted to boats of different height and to suit the stroke of different rowers, all to the end that rowing may be rendered safer and easier, and also to the end that a comparatively inexperienced oarsman can row with a finished and effective stroke.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar reference characters indicate corresponding parts in all the views.

Figure 1 is a broken side elevation of an oar and its connecting oar lock, the latter embodying my invention. Fig. 2 is an enlarged cross section on the line 2—2 of Fig. 1. Fig. 3 is a view similar to Fig. 1 but with the oar elevated and in its horizontal or return position. Fig. 4 is a broken detail plan of the structure embodying my invention. Fig. 5 is a cross section on the line 5—5 and shows diagrammatically the different positions which the oar automatically assumes when in use. Fig. 6 is a broken side elevation of my invention showing a slightly modified means of connecting the oar and its turning arm. Fig. 7 is a view similar to Fig. 6 but with the oar raised and turned at right angles to the position shown in Fig. 6, and Fig. 8 is a detail showing the modified connection between the arm and oar.

The oar 10 can be of any usual or approved kind, and I have shown it in connection with an oar lock 11 which, except for

the attachments, is conventional, and which can be any suitable form of oar lock. The oar lock as illustrated has a shank 12 turning in a socket 13, but so far as my invention is concerned, any type of oar lock can be used, but one side or member thereof should be provided with a boss 14, or equivalent surface, which abuts with one member 15 of an extensible arm which will be presently described, and in order that the parts 14 and 15 may have a rigid but adjustable connection, I preferably provide the meeting parts with corrugations as shown at 16, and the parts are held together by a bolt 17. Thus by loosening the bolt and freeing the meeting teeth 16, the arm can be turned up or down to adapt it to any particular style of boat.

It is desired to have the arm which connects the oar lock with the oar, extensible, and to this end the member 15 is recessed on one side so as to receive the second member 18, and this is slotted as shown at 19 so as to receive the fastening bolt 20 which extends through both members 15 and 18, and which by being tightened clamps the members in fixed relation. If desired the parts 18 and 15, where they meet, can be corrugated or toothed, like the parts 14 and 15 already described. The member 18 of the extensible arm is bent toward the oar, and terminates in a hook 18^a which engages a staple 21, the latter being securely fastened to the oar, and in order that the hook may not be accidentally disengaged, it is preferably closed by a spring 22, stiff enough to prevent the accidental freeing of the staple 21, but sufficiently yielding to permit the staple to be forced in and out over the spring.

In practice it will be seen that when the oar is tipped to the position shown in Fig. 1, the blade will be perpendicular to the water, and that it will therefore grip the water properly and effectively, its depth being regulated by the arm 15—18 which connects the oar lock 11 with the oar. As the end of the stroke is reached, however, the inner end of the oar is depressed as usual to raise the outer end, and by bearing down on the oar to effect this action, the oar of course swings below the hook 18^a as shown clearly in Fig. 5, and the blade of the oar is therefore turned to a position at right angles to that which is assumed while in the water, as shown clearly in Fig. 3, which position it holds until a new

stroke is commenced, when the reverse action takes place, and when rowing, the transition from working to feathered position is gradual, so that automatically the oar
5 assumes the correct position for an efficient stroke.

Many oarsmen, and especially expert oarsmen, desire to have the oar so that it can be conveniently shipped. The construction
10 shown in Figs. 6 to 8 meets these requirements and I have shown without changing the principle of the invention, a simple means for providing for the shipping of the oar. As here shown, the oar is connected
15 with an arm 18^b which, however, might just as well be the extensible arm shown in Fig. 4, as the modification here illustrated relates to the connection between the arm and the oar. The arm terminates in the eye 18^c which is
20 also bent into hook form and engages the hook 23 which is preferably attached to the plate 24, and the latter is secured to the oar. Obviously the means of securing the hook is not material. The chief point is that the
25 hook is closed normally by the spring 25 which, however, has its free end bent in as shown at 26. Thus, under ordinary usage, the arm 18^b is held locked to the hook 23, but
30 if the oarsman wishes to ship his oar, he simply pulls the oar toward him and the eye 18^c slips between the hook 23 and the spring 25, thus freeing the oar. Obviously the details of this connection might be changed. For
35 instance, in Figs. 6 to 8 the hook is on the oar and the hook connection on the arm 18^b, while in the other figures the hook is on the arm and the eye or equivalent staple is on the oar.

From the foregoing description it will be
40 clearly seen that the particular style of oar lock is not important, so long as one member is connected by means of an arm with the oar, and that the connection is loose enough to permit the necessary freedom of move-
45 ment. So far as the invention is concerned, it is obvious that the arm connecting the oar

lock and oar might be of a fixed length instead of being extensible, but the latter feature enables the oar lock to be adjusted readily to any specific boat or arm. It will
50 be observed that with my device the oar rests in the oar lock precisely as usual, and in practice the operator uses the oar in the natural manner and the guiding of the oar is perfectly automatic. It will also be seen
55 that the device is extremely simple and inexpensive, and that there is nothing about it to get out of order.

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

1. An oar lock having a laterally extending extensible arm thereon, and means for connecting the arm to an oar.

2. An oar lock having a laterally extending arm adapted to connect with an oar, said arm being adapted to swing up and down with relation to the oar lock, and means for fixing the position of the arm with relation
70 to the oar lock.

3. An oar lock having a laterally extending arm adjustable on one side of the oar lock, and a free connection between the arm and an oar.

4. The combination with a conventional
75 oar-lock, of an arm arranged to swing vertically on one member of the oar-lock, means for fixing the position of the arm with relation to the oar-lock, and a free connection between the arm and an oar in the oar-lock. 80

5. The combination with a conventional oar-lock, of a swinging arm adjustably secured to one member of the oar-lock, said arm being arranged to extend parallel with the oar in the oar-lock, and a hook and eye
85 connection between the arm and the oar in the oar-lock.

THOMAS C. LUCE.

Witnesses:

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JOHN J. GLYNN.