

No. 612,025.

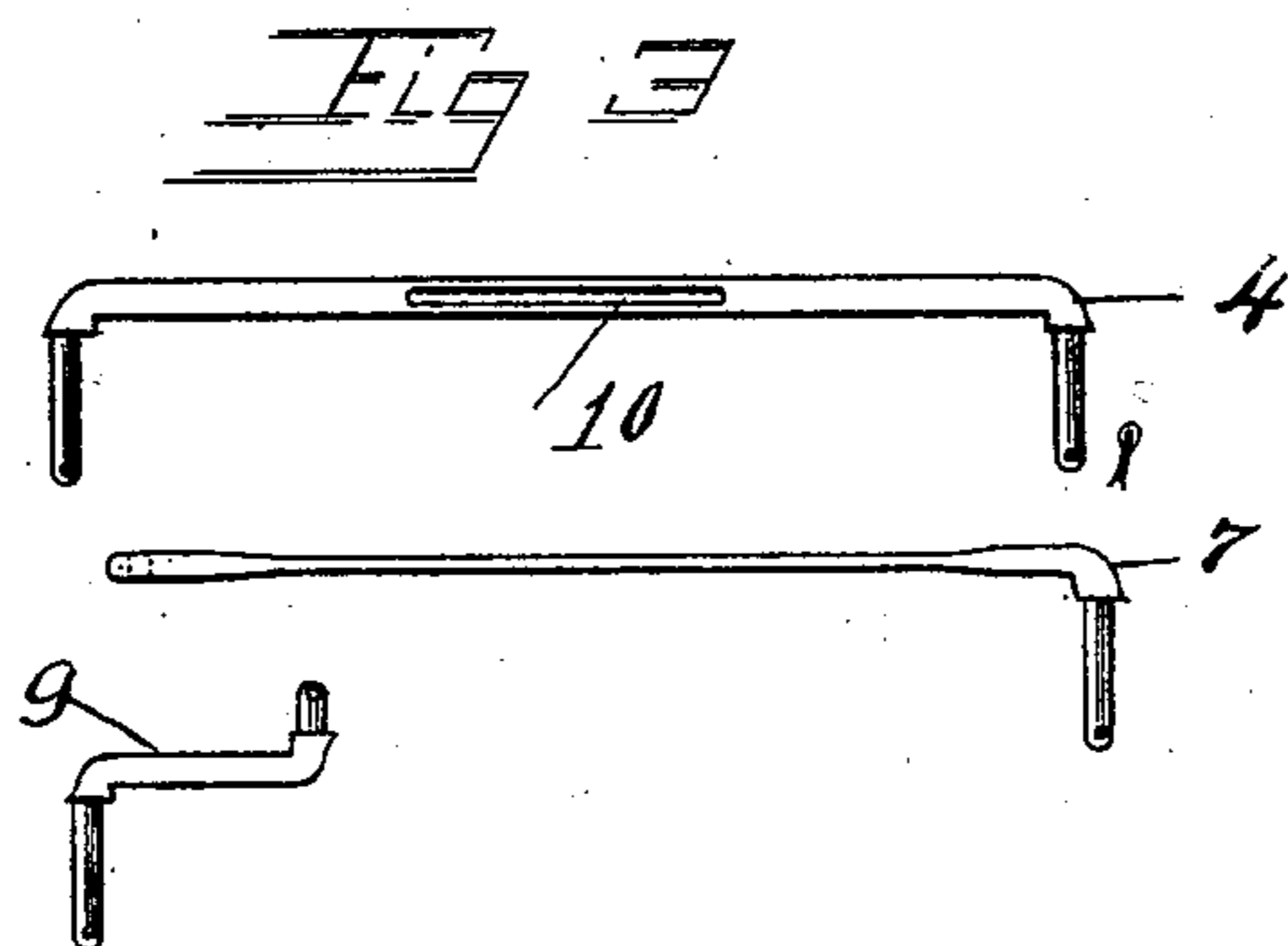
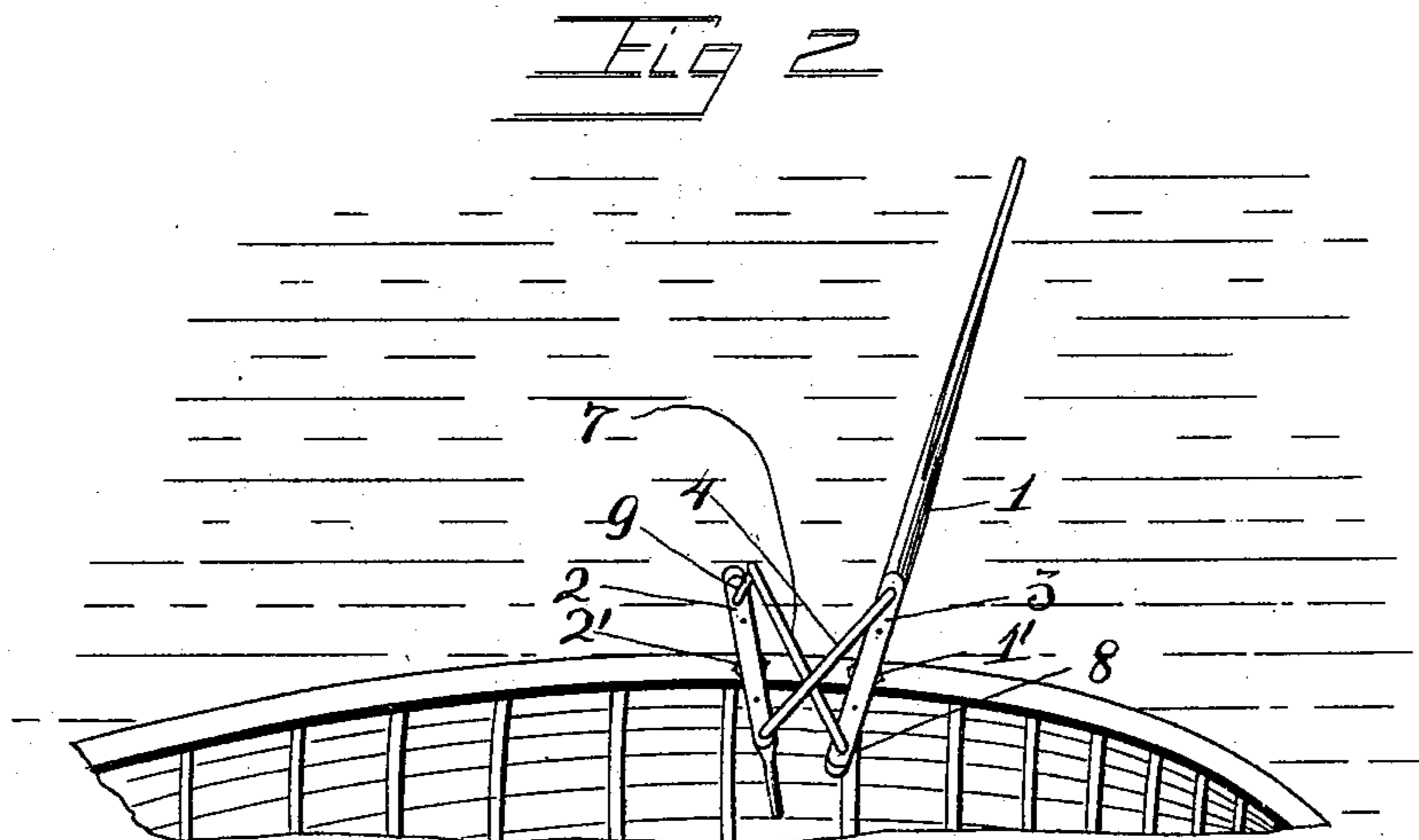
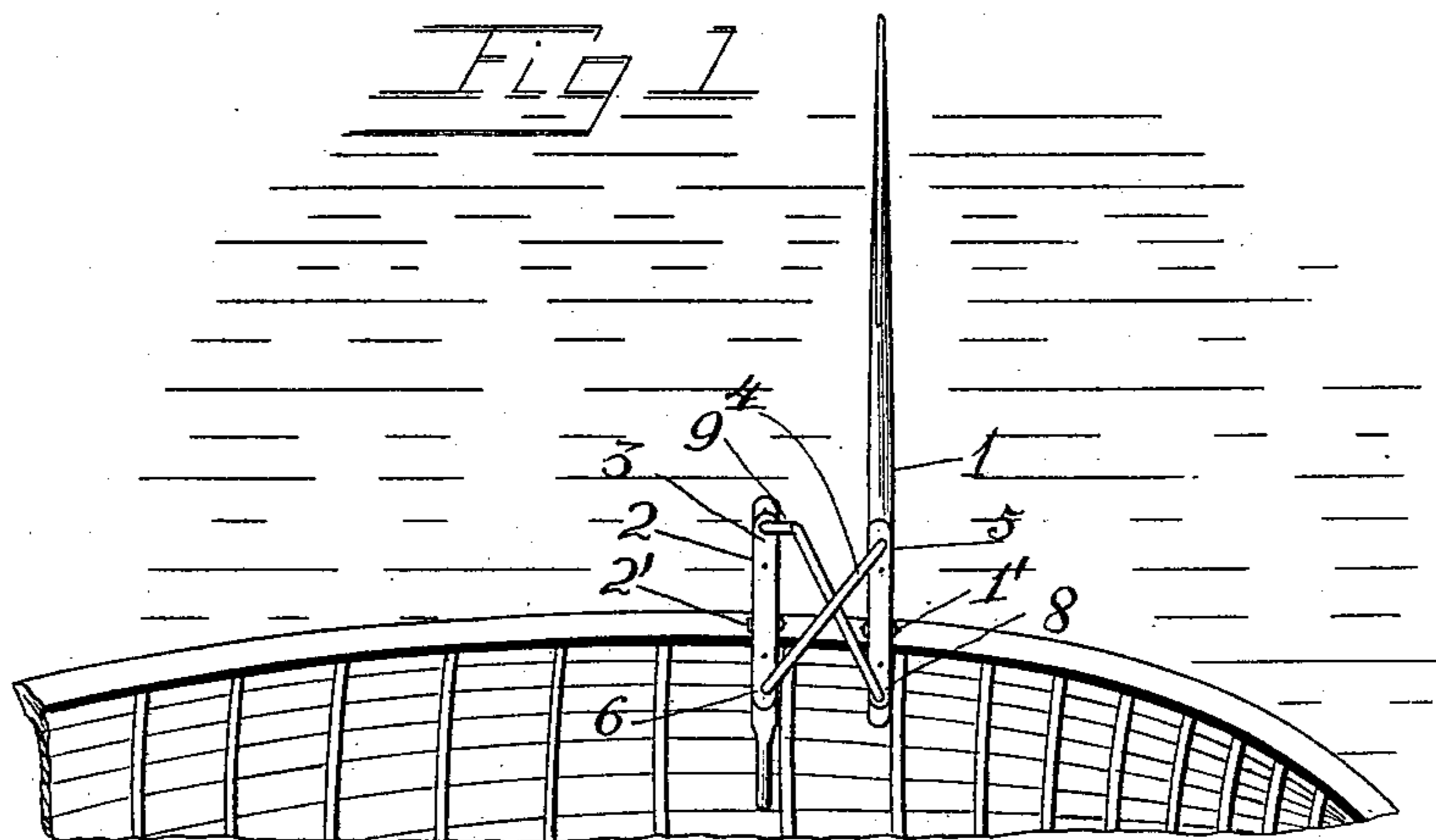
Patented Oct. 11, 1898.

N. W. EDWARDS.

BOW FACING OAR.

(Application filed Mar. 24, 1897.)

(No Model.)



WITNESSES

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# UNITED STATES PATENT OFFICE.

NOAH WEBSTER EDWARDS, OF COLUMBIA, MISSOURI.

## BOW-FACING OAR.

SPECIFICATION forming part of Letters Patent No. 612,025, dated October 11, 1898.

Application filed March 24, 1897. Serial No. 629,009. (No model.)

*To all whom it may concern:*

Be it known that I, NOAH WEBSTER EDWARDS, of Columbia, in the county of Boone and State of Missouri, 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.

My invention relates to improvements in oars; and the object I have in view is to provide an oar whereby an operator can face the bow of the boat instead of the stern and direct its course.

Another object is to provide mechanism whereby an operator may propel the boat with a minimum amount of labor.

The invention consists in the combination, with an oar and an operating-lever, of a link and cross-rods pivotally united to the oar and operating-lever and the whole pivotally mounted upon the side or gunwale of the boat; and the invention further consists in the detailed construction of parts, which will be hereinafter more fully described and claimed.

Referring to the accompanying drawings, forming a part of this specification, Figure 1 is a plan view showing my invention applied. Fig. 2 is a similar view showing the oar ready for a stroke. Fig. 3 is a detail view of the connecting-arms and the link.

Like numerals of reference denote corresponding parts in all the figures of the drawings.

The oar 1 is pivoted or fulcrumed near its inner end to an oar-lock 1', said oar-lock being in turn pivoted to the side or gunwale of the boat. A short distance from the oar 1 I provide an operating-lever 2, which is also pivoted to an oar-lock 2'. As shown in Fig. 1, the operating-lever and the oar lie parallel to each other and on the same horizontal plane.

On the oar 1 and operating-lever 2 I preferably provide wear-plates 3, which, besides protecting the oar and lever, strengthen them at the points where there is the greatest strain.

Connecting the operating-lever at a point at the rear of its pivot and the oar at a point in front of its pivot is a rod 4. This rod has its extremities bent at right angles, forming

arms, as shown in Fig. 3, which arms extend through holes or apertures 5 and 6 in the oar and lever, respectively, and are adapted to be loosely secured therein by nuts, pins, or other suitable fastening means. I provide a slot 10 in the rod 4, the purpose of which will be hereinafter described.

The rod 7 has one end bent at a right angle, forming a short arm similar to those on rod 4, which arm extends through a hole or aperture 8 adjacent to the inner end of the oar and is suitably fastened therein in any preferred manner. The opposite end of this rod 7 is preferably provided with an aperture which is adapted to receive the short arm of a connecting-link 9. This link 9 is preferably in the form shown by the detail view, Fig. 3, and connects the outer extremity of the rod 7 with the operating-lever 2. The rod 7 is flat for nearly the whole of its length, as shown, which flat portion extends through and works in the slot 10 of the rod 4. Thus it will be seen that the rods 4 and 7 cross on the same horizontal plane, but do not interfere one with the other in their operation. By the use of this link 9 I am enabled to so position the levers as to obtain increased motion at the handle and free or outer end of the oar and increased power with less motion at the end of the lever and the short end of the oar. For instance, the distance between the pivot 1' and the pivotal point 8 at the end of oar may be greater than the distance from the pivot 2' and the pivotal point 9 of the operating-lever to give the increased power, in which event the link 9 takes the position shown in Fig. 2.

My device is simple and economical. The rods, crossing as described, take up a minimum amount of space and enable the device to present a neat appearance, besides being durable and effective.

In operation the oarsman is seated facing the bow of the boat, and by pushing the operating-levers forward the oars are brought to a position for the stroke. When the operating-levers are moved in the opposite direction, the oars are moved in a direction to propel the boat forward, as will be understood. The depth of the oars in the water is regulated by means of the levers and oars being pivotally attached to oar-locks and

through the medium of the connecting-rods 4 7, which keep the levers and oars on the same horizontal or inclined plane.

It will be understood that the oar and its 5 operating devices can easily be removed from the boat by having the oar and operating-lever detachably pivoted to the oar-locks 1' and 2', respectively, or by removing the oar-locks with the device.

10 From the foregoing description it will be seen that I have produced an oar which will enable the operator to face the direction in which the boat is moving, so that a view can be obtained of objects in the course of the 15 boat and its direction changed to avoid the same.

It is thought that the advantages of my device will be readily appreciated by those skilled in the art to which it appertains.

20 I am aware that changes in the form and proportion of parts may be made by a skilled mechanic without departing from the spirit of my invention, and I therefore reserve the right to make such modifications as fairly fall 25 within the scope thereof. For example, it is not necessary to have one rod pass through a slot in the other rod, &c.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with an oar and an operating-lever pivotally mounted upon a boat, 30 crossed rods connecting said oar and operating-lever on opposite sides of their fulcrums, of a link attached to one of the cross-rods, 35 said cross-rods and link pivotally connecting the oar and operating-lever, substantially as described.

2. The combination with an oar and an operating-lever pivotally mounted upon a boat, 40 of crossed rods pivotally connecting said oar and lever on opposite sides of their fulcrums, one of said rods being slotted to receive the other which passes therethrough, and a link 45 connecting one of the rods to the operating-lever, said link having its ends turned in opposite directions and engaging apertures in the rod and lever, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscrib- 50 ing witnesses.

NOAH WEBSTER EDWARDS.

Witnesses:

J. G. EDWARDS,  
IRVIN DAVIS.