## W. N. BLAKEMAN, Jr.

SLIDING ROW-LOCKS, &c.

No. 184,031.

Patented Nov. 7, 1876.

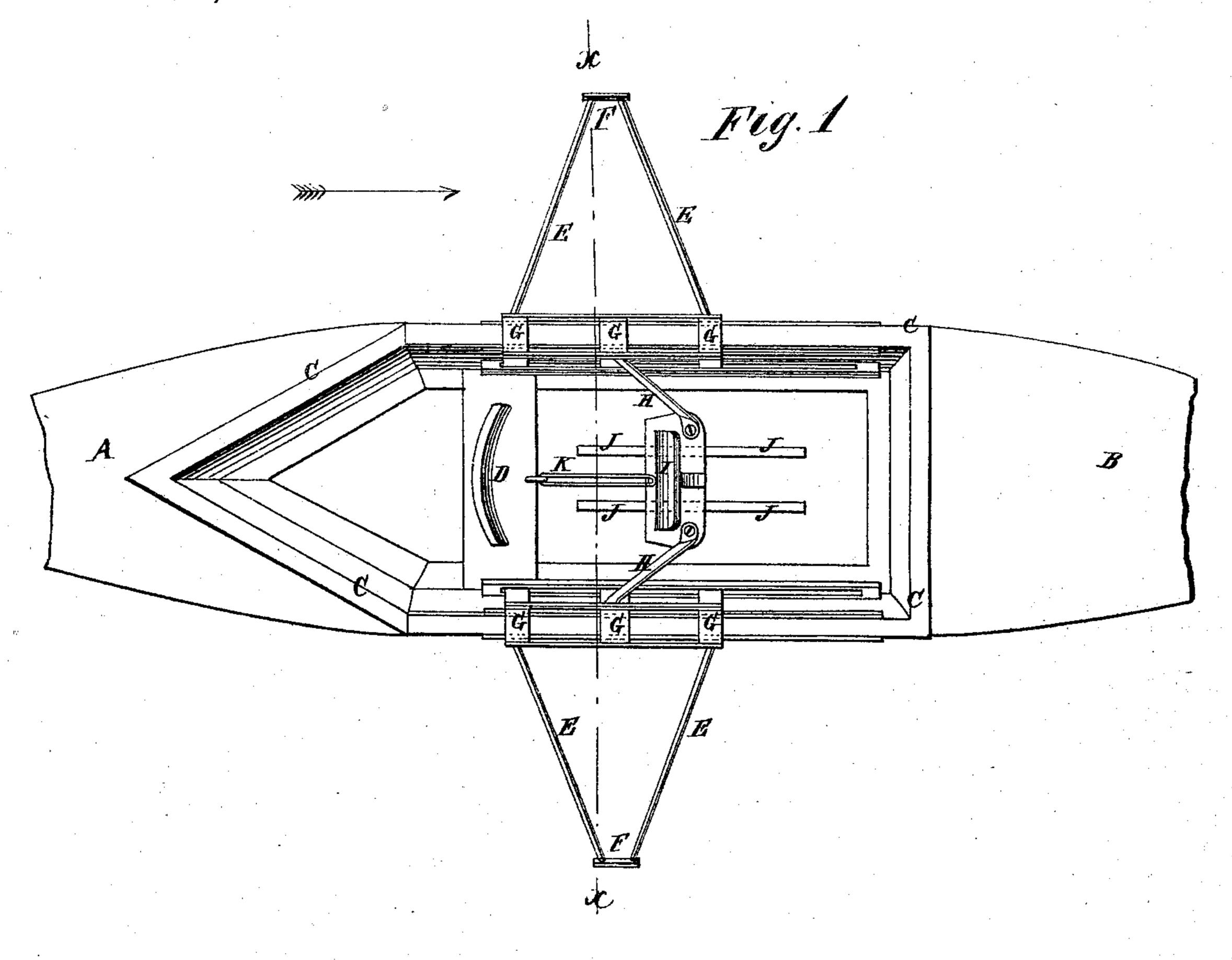
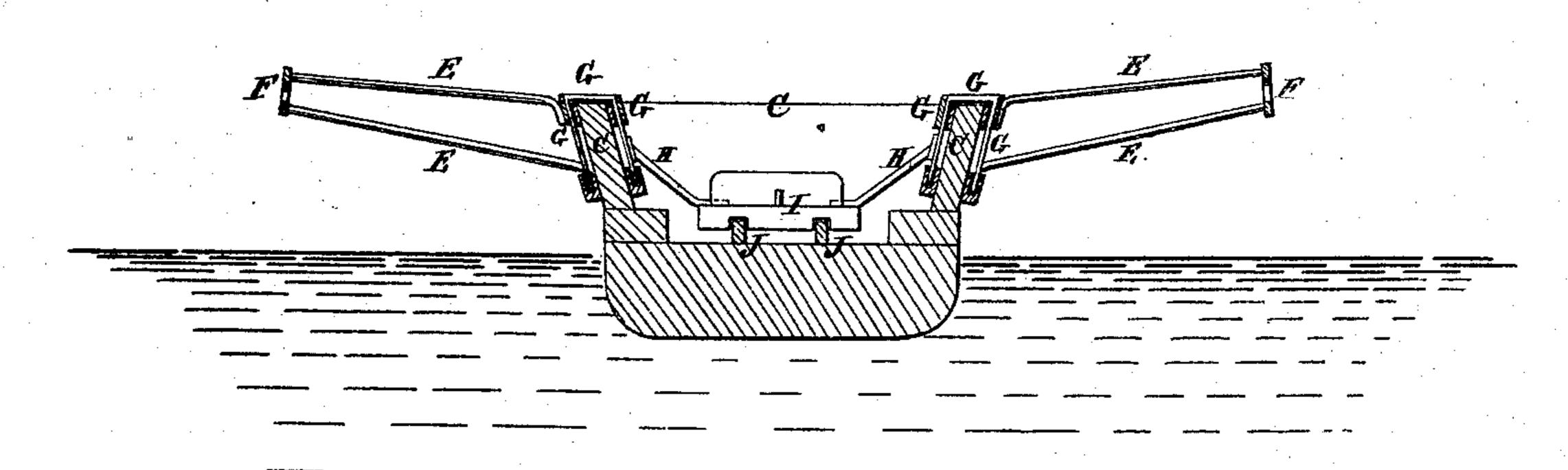


Fig. C



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## UNITED STATES PATENT OFFICE

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## IMPROVEMENT IN SLIDING ROWLOCKS, &c.

Specification forming part of Letters Patent No. 184,031, dated November 7, 1876; application filed September 20, 1875.

To all whom it may concern:

Be it known that I, WILLIAM N. BLAKE-MAN, of the city, county, and State of New York, have invented a new and useful Improvement in Sliding Oar-Locks, of which the following is a specification:

Figure 1 is a top view of a part of a racing shell-boat, to which my improvement has been applied. Fig. 2 is a vertical cross-section of the same, taken through the line x x, Fig. 1.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish boats provided with sliding oar-locks to enable the oarsman to keep his oar longer in the water when making a stroke, without retarding the motion of the boat by the recovery, than is possible when sliding or stationary seats are used without my improvement.

The invention consists in the combination of the sliding plates or frames, the connecting-rods, the sliding foot-rest, the ways, and either with or without the springs, with the oar-locks, whether the outrigger be used or not, the boat, and the stationary seat, as here-

inafter fully described.

A represents the bow of the boat; B, the stern, and C the well, in which the oarsman sits. D is the seat, which is stationary, being firmly attached to the frame of the boat, and provided with a small back for the oarsman to brace against when pulling. E are the outriggers or arms, to the outer ends of which the oar-locks F are attached, and the inner ends of which are attached to frames or plates G, that slide for the space of twelve inches, more or less, upon the edges of the boat, or upon ways attached to said sides.

In the case of a boat upon which outriggers are not used, the oar locks F are attached directly to the frame or plate G. In this case the plates G may be made with a tongue sliding in a groove in the top of the

gunwale of the boat.

To the frames or plates G are attached rods H, which project downward and sternward, and the inner ends of which are attached to the foot-rest I. The foot-rest I slides upon ways

J, attached to the bottom of the boat in the same way as the sliding seats now slide.

K are rubber or other springs, one end of which is attached to the sliding foot-rest I, or to the sliding frames or plates G, and their other ends are attached to the seat D, or to the frame of the boat. The springs K must have sufficient strength to bring the sliding frames or plates G, the foot-rest I, and the oars back to their places, when the oars are raised out of the water in recovering.

With this construction, as the oarsman in making the stroke pulls upon the oars, the natural extension of his legs forces the footrest I toward the stern of the boat, carrying the sliding frames or plates G and their attachments with it, and thus keeps the oars

longer in the water.

As the oars are raised out of the water in recovering, the springs K draw the plates or frames G, the foot-rest I, and the oars toward the bow of the boat and into position for beginning the next stroke. With this arrangement the recovery is effected without retarding the motion of the boat, which is the great objection to the sliding seat.

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

Patent—

1. In a row-boat provided with a stationary seat, the combination of the sliding plates or frames G, the rods H, the sliding foot-rest I, the ways J, and the springs K, with the oarlocks F, whether the outriggers E be used or not, all constructed and arranged substantially as and for the purpose set forth.

2. In a row-boat provided with a stationary seat, the combination of the sliding plates or frames G, the rods H, the sliding foot-rest I, the ways J with the oar-locks F, whether the outriggers E be used or not, all constructed and arranged substantially as described.

3. An outrigger or oar lock sliding upon the edges or sides of the boat, in combination with a sliding foot-rest, substantially as described.

WILLIAM N. BLAKEMAN, JR. Witnesses:

JAMES T. GRAHAM, T. B. MOSHER.