

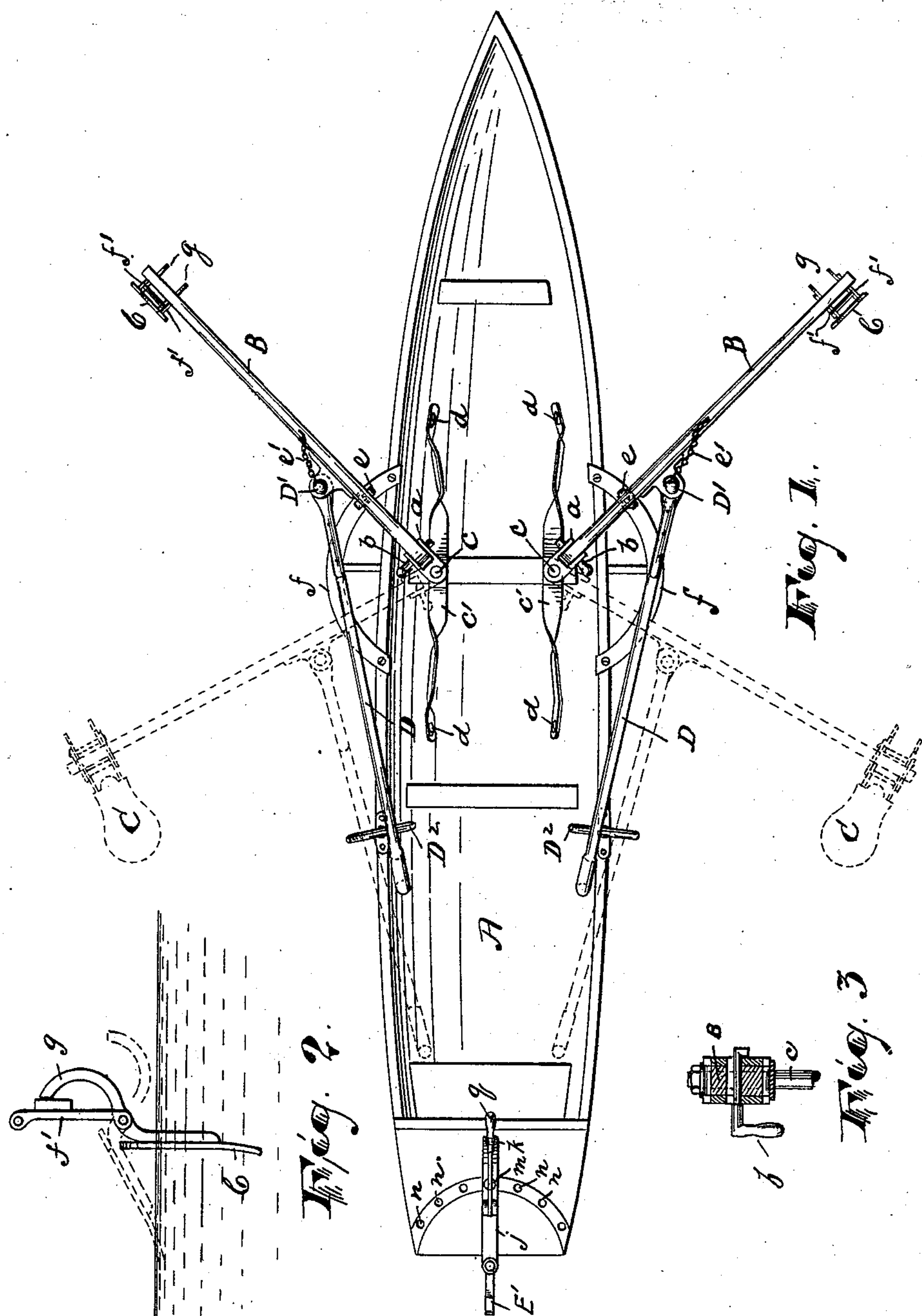
(No Model.)

2 Sheets—Sheet 1.

G. VOGEL.
ROWBOAT.

No. 528,702.

Patented Nov. 6, 1894.



WITNESSES:

INVENTOR

Robert A. Solberg
Louisa Brown

Gustav Vogel

BY *Drake* ATTY'S

(No Model.)

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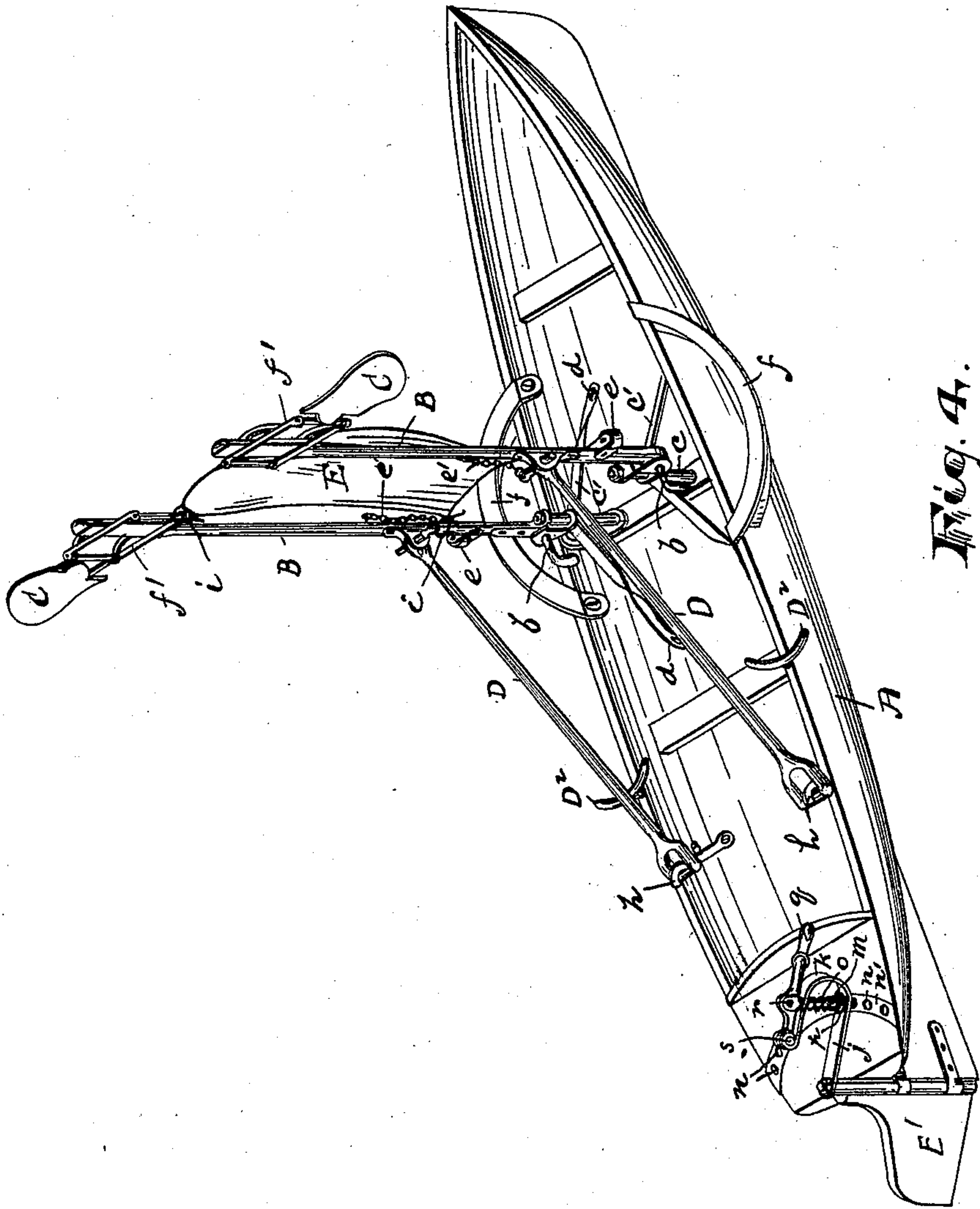


Fig. 4.

WITNESSES:

INVENTOR

Robert Sullberger
Louisa Browne

Gustav Vogel,

BY *Frank O.* ATTY'S.

UNITED STATES PATENT OFFICE.

GUSTAV VOGEL, OF ORANGE VALLEY, NEW JERSEY.

ROW-BOAT.

SPECIFICATION forming part of Letters Patent No. 528,702, dated November 6, 1894.

Application filed April 4, 1894. Serial No. 506,261. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV VOGEL, a citizen of the United States, residing at Orange Valley, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Row-Boats; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The objects of this invention are to enable the rower to sit facing the bow instead of the stern of the boat, to use the oars more effectively in propelling the boat, to utilize said oars as, or convert them into, masts to carry a sail or sails whenever desired, and to secure other advantages and results hereinafter referred to.

The invention consists in the improvements and in the combinations and arrangements of the parts thereof, as herein set forth, and finally pointed out in the claims.

Referring to the accompanying drawings in which like letters of reference indicate corresponding parts in each of the figures where they occur, Figure 1 represents, in plan, a row boat embodying my improvements. Fig. 2 is a detail in side or front elevation of a portion of one of the oars. Fig. 3 is a detail in section. Fig. 4 is a perspective view showing the oars arranged in vertical positions and utilized as masts, and a sail secured thereon.

In said drawings A, represents the boat; B, the oars; C, the blades or paddles, which are pivotally secured to the outer ends of said oars, and D, the handles which are pivotally connected to the oars at D', and extend therefrom to points within easy and convenient reach by the rower, and rest in suitable supports D², pivotally adjusted upon the sides of the boat for the purpose, as indicated in Figs. 1 and 4. The inner ends of the oars are pivotally connected with brackets a, by means of key pivots, b, the handles of which are weighted to normally hold the key pivots in position, and prevent accidental dis-

placement, but are capable of being turned to bring the key ends of the pivots into coincidence with the key hole when it is desired to disconnect the oars from said brackets, as will be understood. This arrangement allows the oars to be readily raised into a vertical position at any time for the purpose of attaching a sail thereto, as indicated in Fig. 4, or for any other purpose. Said brackets are also pivotally connected by means of vertically arranged pivots c, to suitable supports c', fastened to the sides of the boat at d, thereby rendering said oars capable of being moved freely in a horizontal direction by the rower as indicated in Fig. 1. Said oars are provided, at a short distance from their inner ends, with an anti-friction roller, e, which has a bearing upon a curved rest or support f, fastened to the sides of the boat at the top, the purpose of which will be readily understood, upon reference to Fig. 1. At their outer extremities, said oars are provided with blades or paddles, C, above referred to which are pivotally secured to suitable supports or arms f', firmly secured to the ends of said oars in a vertical position; said paddles being provided with a tail piece or pieces g, which are adapted to engage with the side of said oars to hold the paddles in a vertical position when they are operated to propel the boat forward, as indicated in Figs. 1 and 2.

The pivotal pins at D', above referred to, are connected with the oars by means of chains e', or other suitable connectives to prevent said pins from being lost.

It will be seen upon reference to said Fig. 1, that when the oars are being thrown forward to cause the paddles to engage with the water to propel the boat, that said paddles automatically assume an approximately horizontal position, thereby causing the least possible degree of resistance, and that in the act of propelling the boat they assume a vertical position.

It will be understood that the oars, *per se*, are not intended to dip or work in the water.

When the oars are converted into masts, the inner ends of the handles D, engage with suitable hooks or holders h, whereby said handles are converted into braces, and serve to hold said masts firmly in said vertical po-

sition, as will be understood upon reference to Fig. 4, the sail, E, in this instance, being secured at the four corners thereof to the masts by means of appropriate cords *i*, but
 5 said sail or sails may be secured in any other appropriate manner, as will be understood.

Another object of my improvement is to facilitate the steering of the vessel or boat, for which purpose, I attach to the upper end
 10 of the rudder, E', an arm or tiller *j*, curved or bent over upon itself at *k*, and forming two bearings, through which passes a vertical rod *m*, the lower end of which engages in apertures *n*, in a curved plate *n'*, secured upon
 15 the after deck of the boat, as indicated in Figs. 1 and 4, a spring *o*, being interposed between a collar or shoulder *p*, on said rod *m*, and the upper bearing, the normal pressure of which is to keep the rod into engagement
 20 with said apertures. The rod is raised or disengaged from said plate by means of a lever *q*, fulcrumed at *r*, in the top of said rod, the short arm of said lever being pivotally connected at *s*, with the projecting end of said
 25 upper bearing, as will be understood upon reference to Figs. 1 and 4. By means of this arrangement, the arm of tiller *j*, can be set at any position desired, so as to control the course of the boat or to turn it in either direction, as
 30 will be obvious.

While I have shown and described in this application an improved tiller device, I do not claim the same herein, but reserve the right to claim the same in another application.

35 Having thus described my invention, what I claim as new, and wish to secure by Letters Patent, is—

1. In a row-boat, the combination of oars
 40 pivotally connected at their inner ends to a bracket or support adapted to rotate or turn horizontally, whereby said oars may be worked horizontally to propel the boat or be

raised to a vertical position to serve as masts upon which to fasten a sail, and means for bracing and holding them in said vertical position, as and for the purposes set forth. 45

2. The combination in a row-boat, of oars pivotally connected with a suitable support secured to the boat, and capable of being worked horizontally to propel said boat or of
 50 being raised to a vertical position to serve as masts; handles pivotally connected with said oars and adapted to be grasped by the rower to propel the boat and also to serve as braces to said oars when the latter are converted
 55 into masts, as and for the purposes set forth.

3. The combination in a row boat with oars arranged to work in a horizontal position, of paddles or blades pivotally connected to the outer extremities thereof and adapted to au-
 60 tomatically assume a vertical and an approximately horizontal position, respectively, and a handle pivotally connected at one end with said oars, and at the other end adapted to be grasped by the rower to operate said oars, as
 65 and for the purposes set forth.

4. In a row boat, the combination of supports, *c'*, secured to the inside of the boat, curved rests, *f*, also secured to the sides of the boat, oars pivotally connected with said sup-
 70 ports, *c'*, and working horizontally upon said rests, and blades or paddles, C, pivotally connected with said oars at their outer extremities, and adapted to assume a vertical and an approximately horizontal position as they are
 75 moved to and fro in the water, as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of March, 1894.

GUSTAV VOGEL.

Witnesses:

OLIVER DRAKE,
 CHARLES H. PELL.