

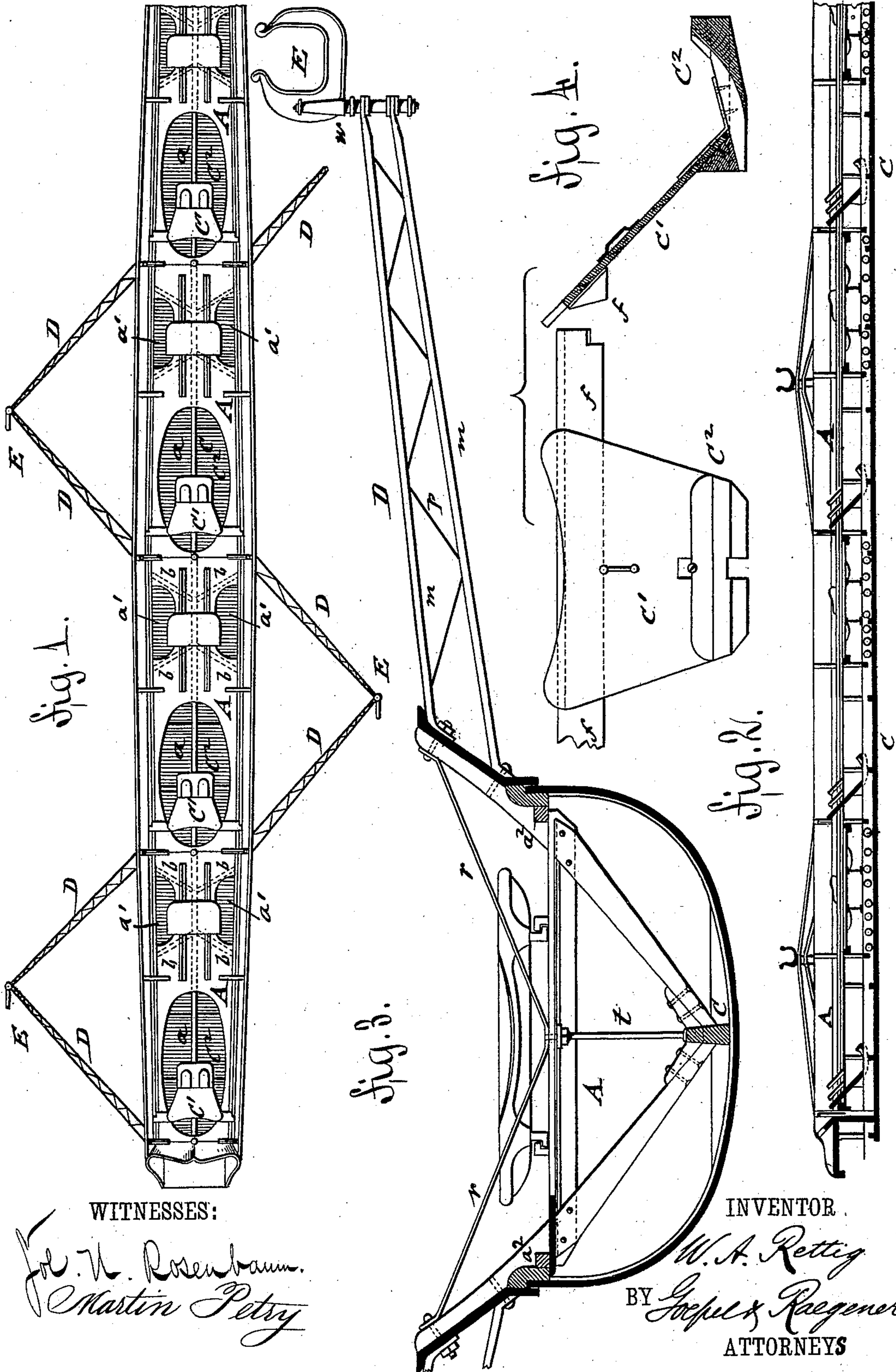
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4 Sheets—Sheet 1.

W. A. RETTIG.
ROW BOAT.

No. 300,895.

Patented June 24, 1884.



WITNESSES:

J. H. Rosenbaum.
Martin Petry

INVENTOR.

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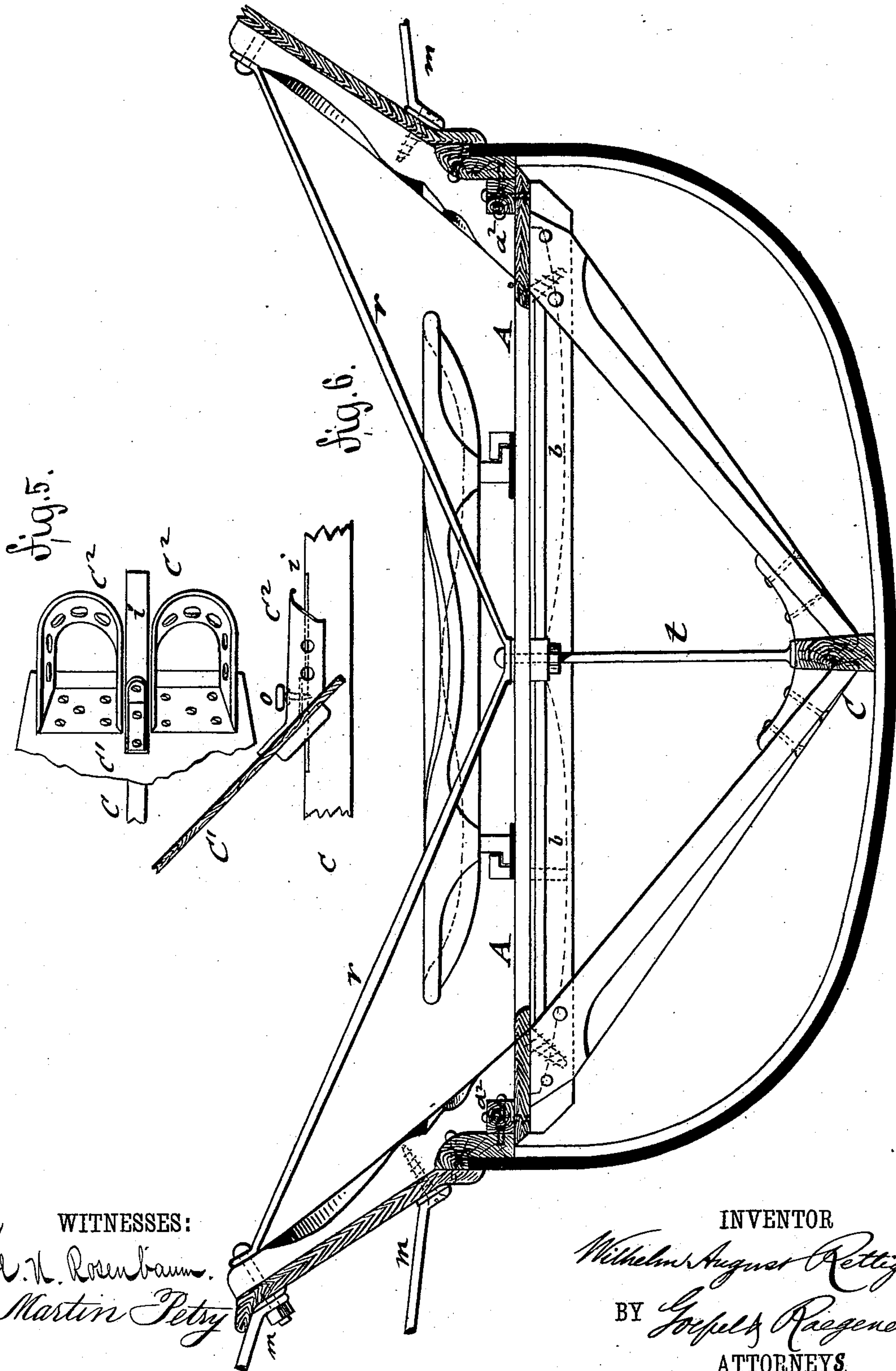
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Patented June 24, 1884.



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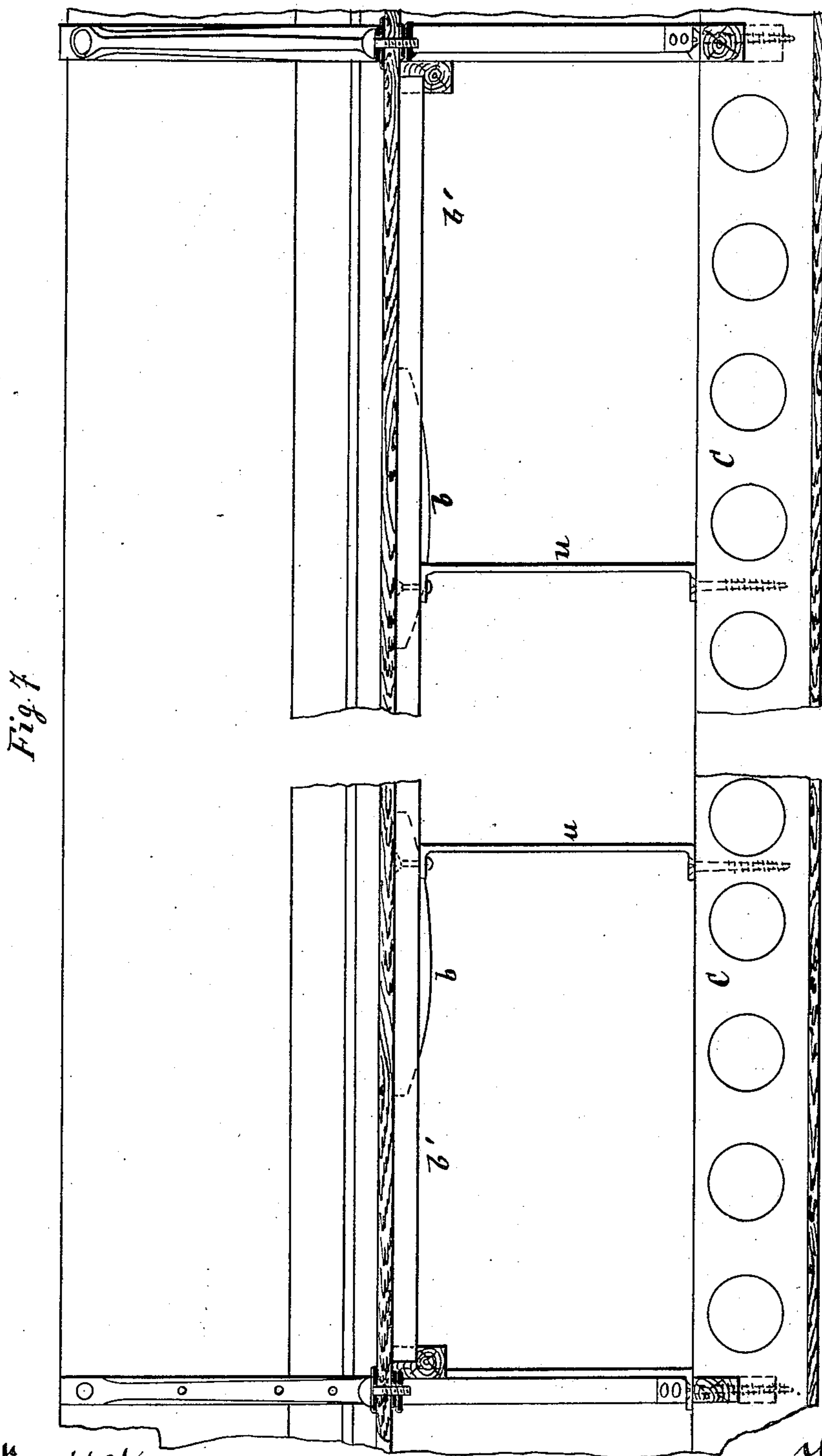
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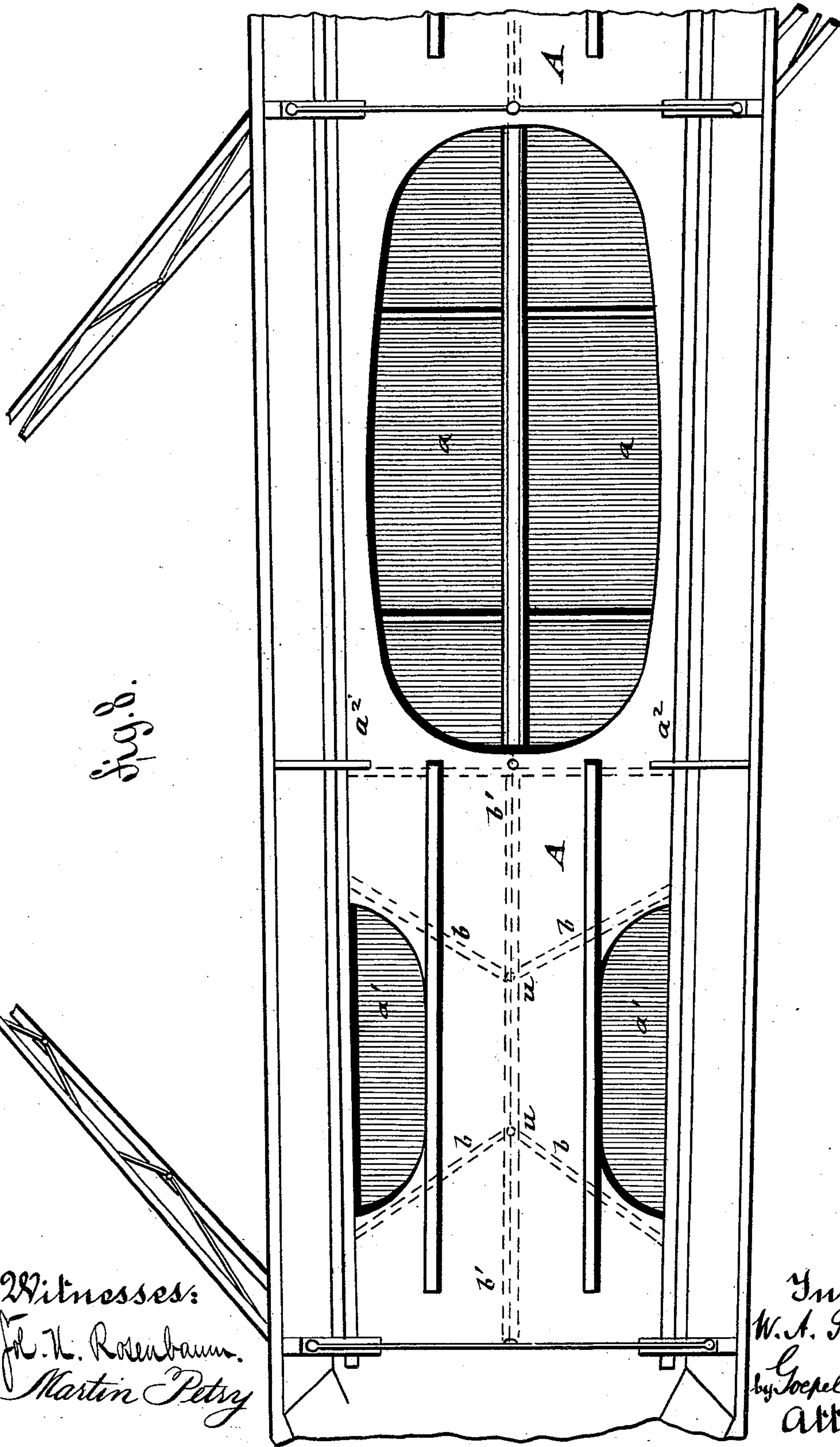
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4 Sheets—Sheet 4.

W. A. RETTIG.
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No. 300,895.

Patented June 24, 1884.



UNITED STATES PATENT OFFICE.

WILHELM AUGUST RETTIG, OF BERLIN, GERMANY.

ROW-BOAT.

SPECIFICATION forming part of Letters Patent No. 300,895, dated June 24, 1884.

Application filed June 29, 1883. (No model.) Patented in England November 4, 1882, No. 5,270; in Belgium November 30, 1882, No. 59,627; in Austria-Hungary January 12, 1883, No. 39,285 and No. 1,120, and in France February 12, 1883, No. 151,945.

To all whom it may concern:

Be it known that I, WILHELM AUGUST RETTIG, of the city of Berlin, Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Row-Boats, (for which Letters Patent have heretofore been granted to me by the Government of Great Britain, No. 5,270, dated November 4, 1882; Belgium, No. 59,627, dated November 30, 1882; France, No. 151,945, dated February 12, 1883, and Austria-Hungary, No. 39,285 and No. 1,120, dated January 12, 1883,) of which the following is a specification.

This invention has reference to certain improvements in row-boats intended specially for racing purposes, whereby the weight of the boat is considerably diminished, and the same so strengthened in a lateral direction that the so-called "twisting" of the boat is prevented.

The invention consists, first, of a deck that extends transversely across the boat in a horizontal plane below the seats, and that is provided with openings for the feet; secondly, of an improved construction of the foot-rests.

In the accompanying drawings, Figure 1 represents a plan; Fig. 2, a vertical longitudinal section of a row-boat according to my improved construction. Fig. 3 is a vertical transverse section on a larger scale, showing the outriggers. Figs. 4 and 5 are details of the foot-rests. Fig. 6 is a vertical transverse section of the boat on a still larger scale. Figs. 7 and 8 are, respectively, a vertical longitudinal section and a plan of the boat drawn on a larger scale.

Similar letters of reference indicate corresponding parts.

The general construction and form of my improved row-boat is the same as other row-boats built for racing purposes, with the exception that I employ a deck, A, which extends below the seats transversely from gunwale to gunwale across the boat. The deck A is attached to the timbers of the boat, so as to form with the same a strong and rigidly-braced boat, that prevents the so-called "twisting" of the boat, which forms an objectionable fea-

ture of the row-boats heretofore in use. The deck A is provided with elongated openings *a a* for the legs of the oarsmen, and immediately between the same, at both sides of the seats, with side openings, *a'*, by which the weight of the deck A is considerably diminished. The deck A is secured by brass or copper rivets or nails to strips *a''*, which are again secured to the gunwale, as shown in Fig. 6. The stiffening-deck A is provided at the under side, near the sliding seats, with cross-braces *b b*, so as to enable it to bear the weight of the oarsmen at those points. It is further supported below the sliding seats with metallic uprights *u*, which are secured to the keel C and to the longitudinal center strips, *b'*, as shown clearly in Figs. 7 and 8.

In place of the bottom and inclined foot-rests heretofore in use, I employ in connection an inclined foot-board, C', and open or recessed heel-rests of such size that the heels of the oarsmen have ample room therein. The heel-rests may be made of wood, as shown in Fig. 4, or of metal, as shown in Fig. 5, the latter being perforated, so as to reduce their weight. The inclined foot-rests C' are supported on their upper ends against transverse strips *f*, and at their lower ends on the keel C. The keel is provided at the points where the foot-boards C' rest thereon with a metallic face-plate, *i*, having holes for a set-screw, *o*, by which the foot-rests can be securely fastened after they have been adjusted, as shown in Fig. 5.

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

1. The combination, with a row-boat, of a stiffening-deck secured to the gunwale, provided with a seat or seats on its upper side, with a longitudinal strip on its under side, and with transverse braces beneath the seat, and metallic uprights extending between the keel and said center strip, substantially as described.

2. The combination, with a row-boat, of a deck that extends transversely across the boat, and that is provided with central longitudinal openings for the legs of the oarsmen, and with

openings at both sides of the seat for reducing the weight, substantially as set forth.

3. The combination of a row-boat, a deck extending transversely across the boat and
5 having openings for the legs of the oarsmen, inclined foot-boards, and recessed heel-rests at the lower ends of the foot-boards, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

WILHELM AUGUST RETTIG.

Witnesses:

B. ROI,

H. WILOP.