

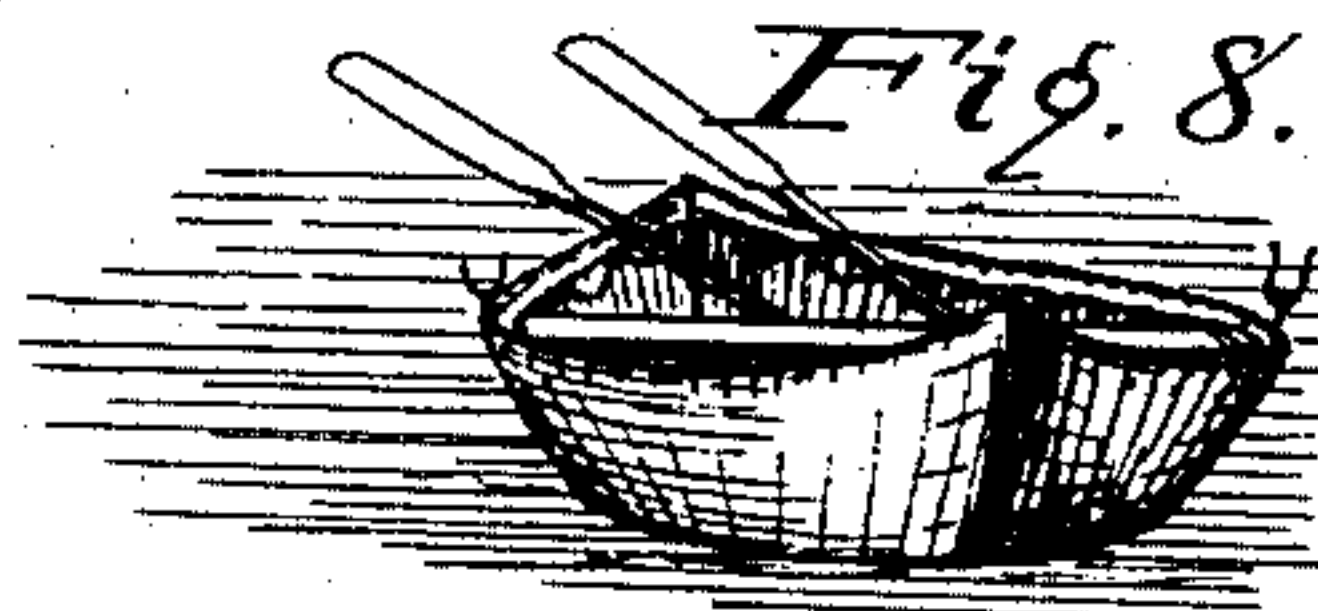
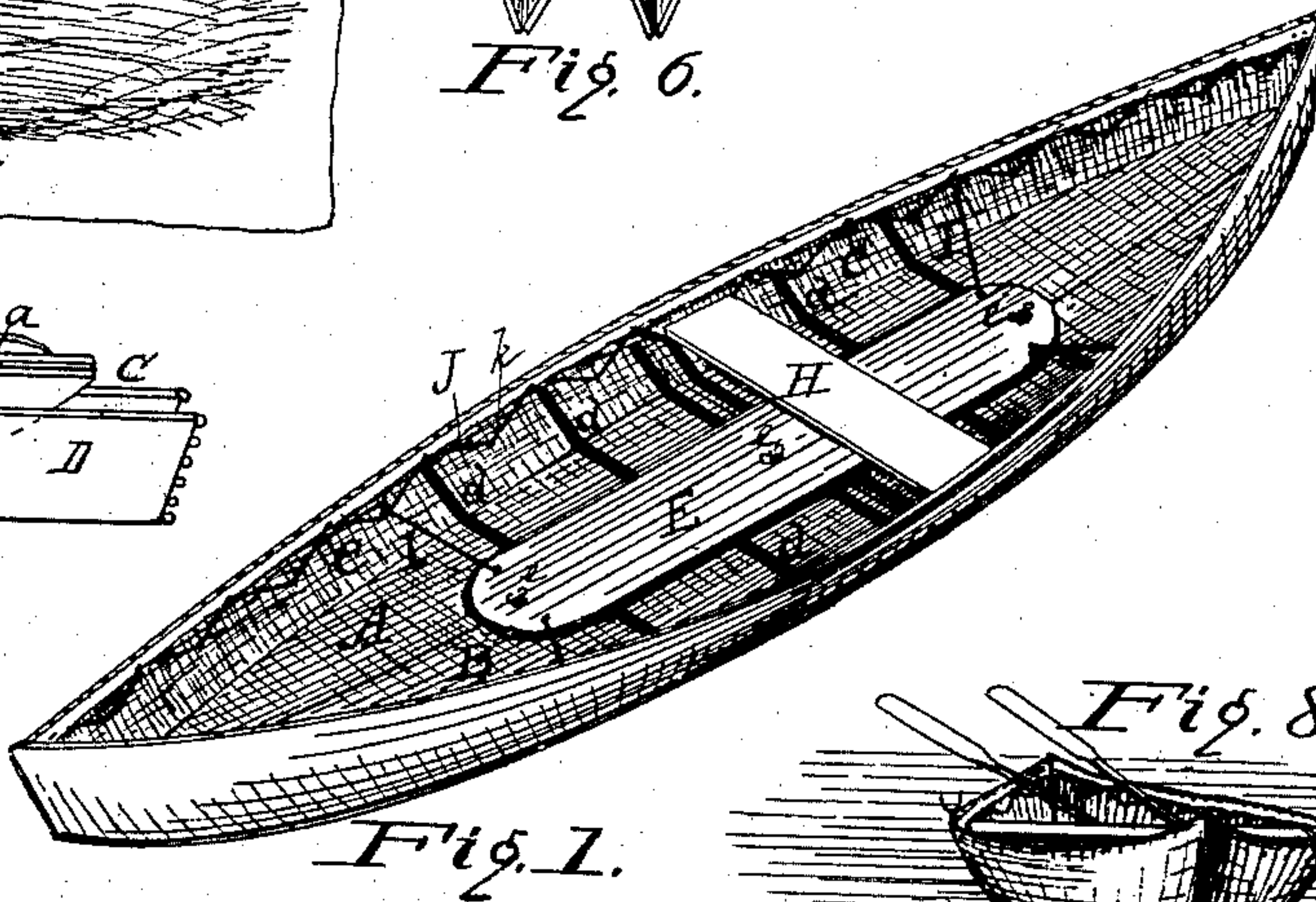
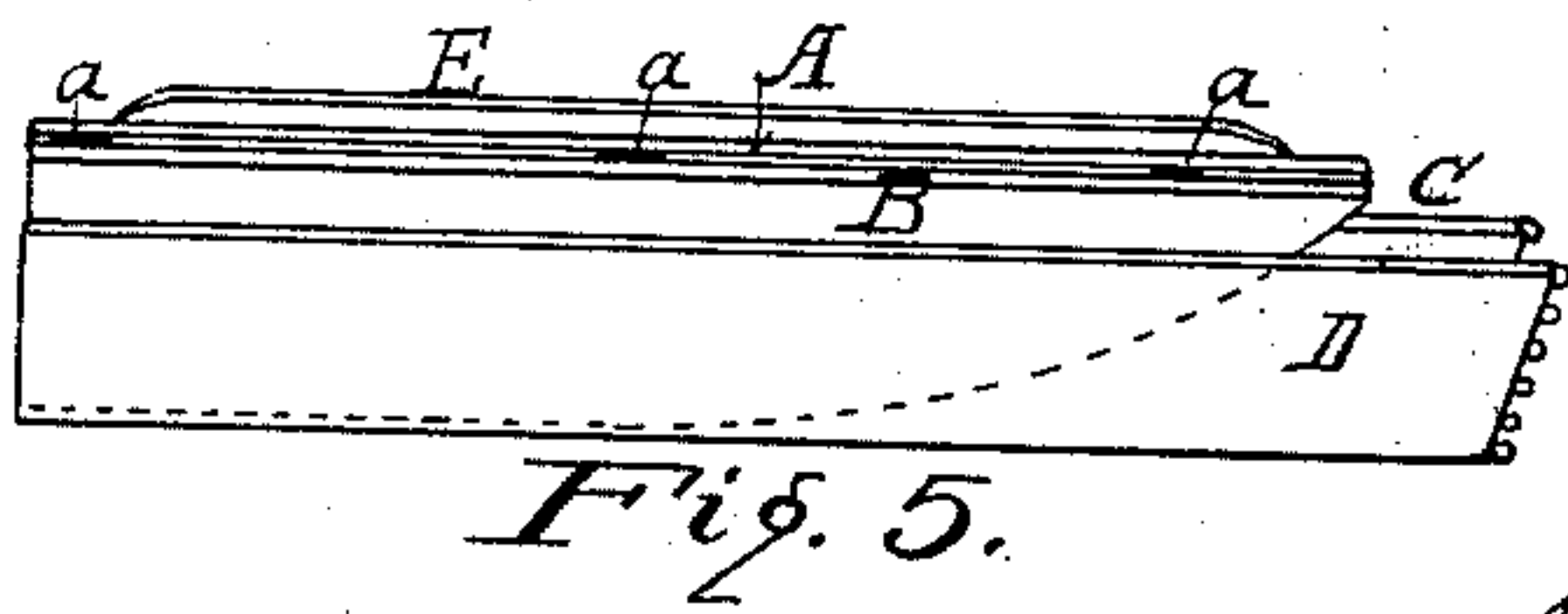
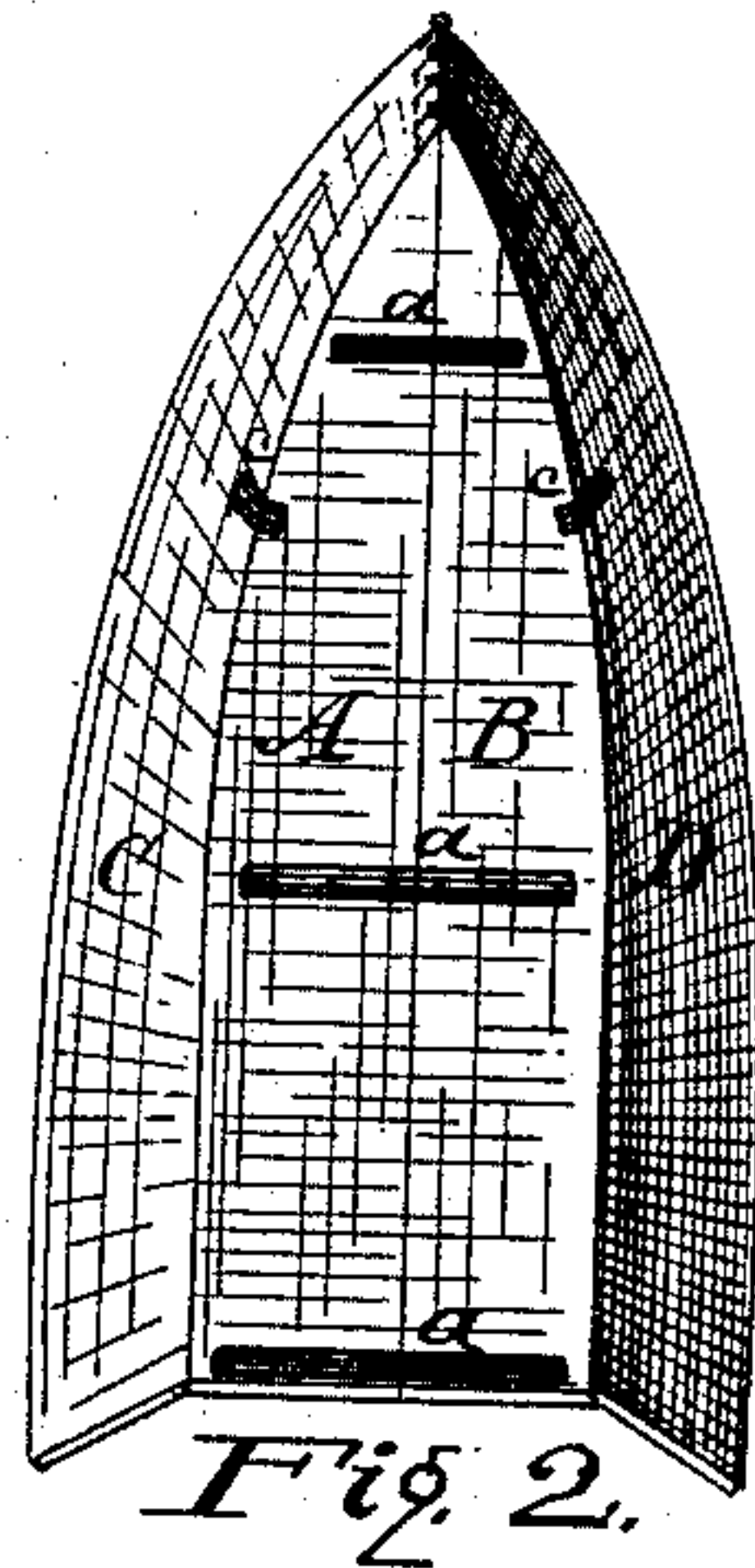
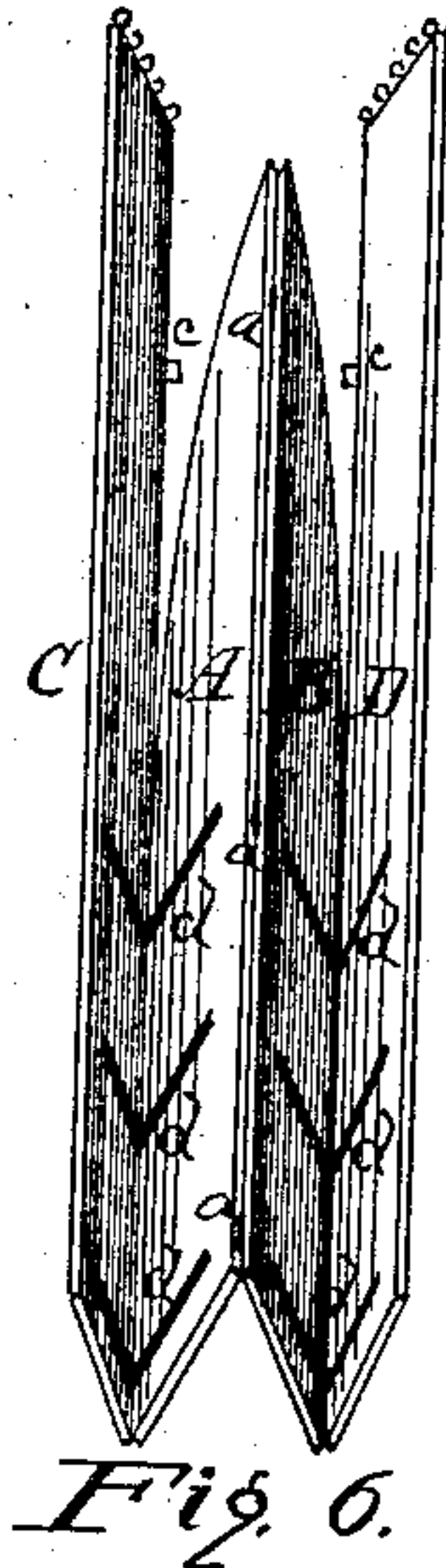
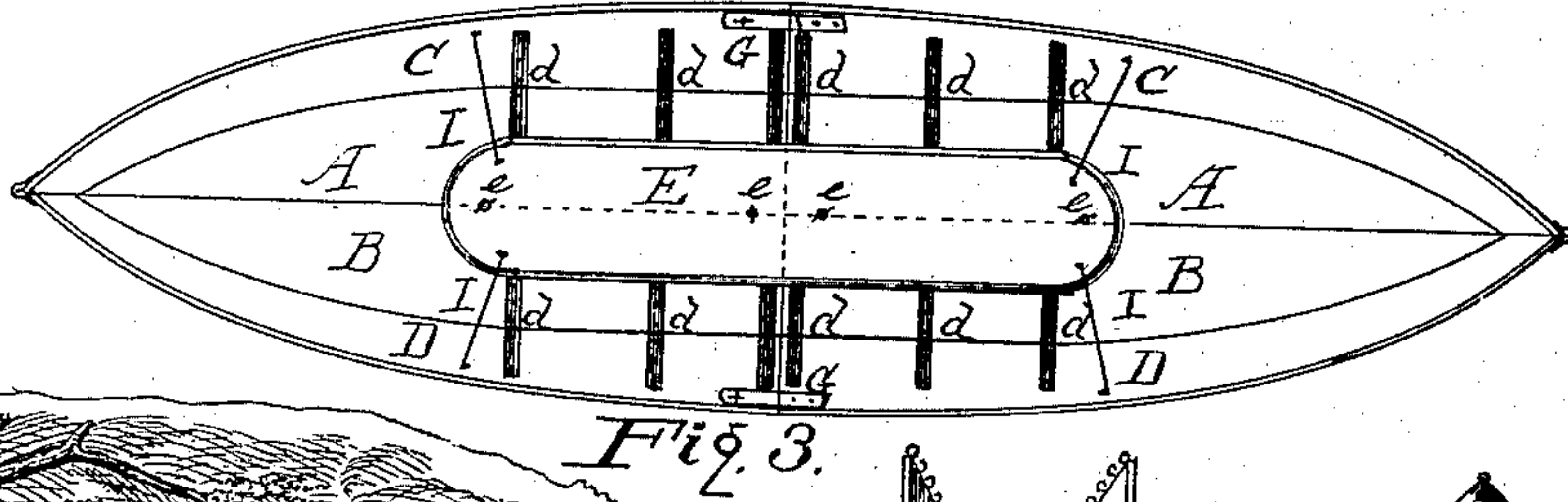
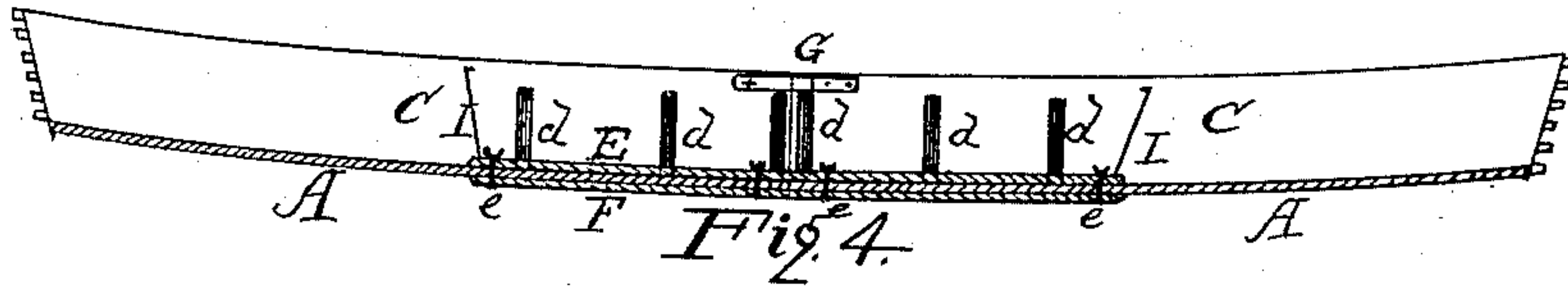
(No Model.)

F. W. URANN.

SECTIONAL AND FOLDING BOAT.

No. 338,450.

Patented Mar. 23, 1886.



WITNESS.

Edw. Caird.
A. B. Allen.

INVENTOR.

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UNITED STATES PATENT OFFICE.

FREDERIC W. URANN, OF PAINESVILLE, OHIO.

SECTIONAL AND FOLDING BOAT.

SPECIFICATION forming part of Letters Patent No. 338,450, dated March 23, 1886.

Application filed November 30, 1885. Serial No. 184,289. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC W. URANN, of Painesville, in the county of Lake and State of Ohio, have invented certain new and useful Improvements in Folding and Sectional Boats, of which the following is a specification.

My invention relates to improvements in sporting-boats, in which the frame-work is made to form two sections, and the bottoms and sides of said sections are hinged together.

The objects of my improvements are, first, to provide a frame-work capable of being folded together in close compact form, and, second, to afford facilities for separating said frame-work into two sections, whereby the boat may be packed into two separate bundles or packages for transportation, and, third, to reduce the weight of the boat, so that it may be easily and conveniently carried by one man, thereby rendering it portable with the least expenditure of time or labor. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the complete boat. Fig. 2 is a view of the bottom of one of the sections of my boat, showing the bottom divided longitudinally into two parts, and said parts hinged together. Fig. 3 is a top or plan view of the boat, showing the manner of securing the two sections together. Fig. 4 is a longitudinal section of the same. Fig. 5 is a view of one of the sections folded together for packing. Fig. 6 is a view of one of the sections partly folded, to show how the several parts fold down upon one another. Fig. 7 is a view showing the two sections folded and packed and the manner of carrying them. Fig. 8 represents the boat afloat and ready for use.

Similar letters refer to similar parts throughout the several views.

A B represent the bottom of the boat, which is divided into two parts, and said parts are united by strap-hinges *a a a*. A portion of the sides of said bottom pieces are curved to a point, the apex of which is at the dividing-line, and a portion of their sides are straight.

C D are two side pieces, which form the sides of the section, and are secured to the straight portion of the sides A B by strap-hinges *d d*. In forming the sections the said side pieces are

bent or sprung to join onto the curved sides of the bottom, and their ends are joined at the apex to each other, to form the stem or bow of the boat. To secure the ends together so they may be opened again, open hinges are employed. One half or one leaf of the hinges is attached to each of the side pieces, and when the two are brought together a pintle is put through the interlocking eyes of the said hinges.

To the lower edge of the side pieces, C D, are attached ears *c c*, for supporting the curved sides of the bottom between the bow and the hinges *d d*.

Two of these sections form the complete boat, and they are joined together in the manner described, as follows: The two sections are placed together, as seen in Figs. 1, 3, and 4, and are secured by means of an upper and lower board, E F, each overlapping the joint, and all three thicknesses are firmly fastened together by bolts *e e e*. These boards serve to strengthen and stiffen the bottom. The upper edges of the sides are fastened together at the joint by a strap, G, hinged to one section and overlapping the joint, and is provided with an eye, which fits over a staple in the adjoining section and held with a removable key. A seat, H, is placed in one of the sections near the joint, and this serves as a spreader to the sides amidship.

I I are brace-rods, secured at one end to the board E by an eye and staple, the other end having a hook which catches in an eye near the upper edge of the sides at the quarters. These serve to spread, brace, and stiffen the sides. The whole of this frame-work is incased in a flexible skin made of a waterproof material, fitting closely to the outside, and is secured by having its edge drawn over the gunwale and fastened by a cord, J, woven through eyelets made in the edge of said skin, and caught with hooks onto loops or buttons *k k* on the sides. The boat, being provided with rowlocks, is now ready for use.

For transportation, the skin is removed, the sections separated, folded, as seen in Fig. 5, and inclosed in sacks, together with the oars, the gun, and such other paraphernalia as a hunter or sportsman may carry. Then, with a strap over his shoulders, the sportsman may

readily carry the two sections of his boat suspended to the ends of said strap under each arm, as represented in Fig. 7. His hands are free for use when desired.

5 The pieces A B C D and E F are made of one-fourth-inch wood, and being protected by the metal of the strap-hinges are very light and strong, thus rendering the boat one capable of the uses to which such boats are required, pos-
 10 sessing the important quality of light weight, so that they are very easily transported from place to place. The bottoms A B, I also make, without the division, into two parts, and hinge the sides C D to said bottom in the same
 15 manner, so that they may be folded down to lie on the bottom. In this case the bottoms do not fold together, and consequently when all are packed together they make a package of double the width that the others do—a very
 20 convenient form for shipment.

I am aware that sectional and folding boats have been made before. I do not, therefore, claim such, broadly; but what I do claim is the peculiar construction and arrangement of
 25 the several parts comprising the frame-work of a boat; and

What I desire to secure by Letters Patent, is—

1. The combination, with the bottom A B,
 30 consisting of one continuous piece, of the side pieces, C D, attached to the midship portion of said bottom by strap-hinges *d d*, enabling said side pieces to be folded to lie down upon said bottom, and when turned upright the free
 35 ends are bent to join onto the curved edges of said bottom piece and secured together at their

meeting ends by staples or eyes and a pintle passed through them, thereby forming one section of the boat-frame, as shown and de-
 40 scribed.

2. The half bottom divided longitudinally into two parts, A B, said parts being joined together by strap-hinges *a a*, enabling said parts to be folded together or opened out, and
 45 said parts A B having attached the side pieces, C D, by means of the strap-hinges *d d*, enabling them to be folded to lie upon said bottom pieces, or when turned upright their free ends are bent to join onto the curved edges of said bottom
 50 and the ends secured together with staples and a pintle, thereby forming one section of boat-frame, all constructed as shown and described.

3. The combination of the two sections of a boat consisting of the bottom A B, divided lon-
 55 gitudinally and hinged together, and provided with sides C D, hinged to said bottom pieces, as described, the union of the two sections consisting in joining said sections amidship and securing them together by means of the
 60 upper and lower boards, E F, and binding them to the bottom with bolts *e e*, and spreading and holding the top edges of the side pieces, C D, with the transverse seat H and the braces I I, and said sections incased in the impervious skin, thus completing the boat,
 65 as shown and described.

FREDERIC W. URANN.

Witnesses:

E. W. LAIRD,
 O. B. ALLEN.