

J. HEGEMAN.

Improvement in Folding-Boats.

No. 129,026.

Patented July 16, 1872.

Fig. 1.

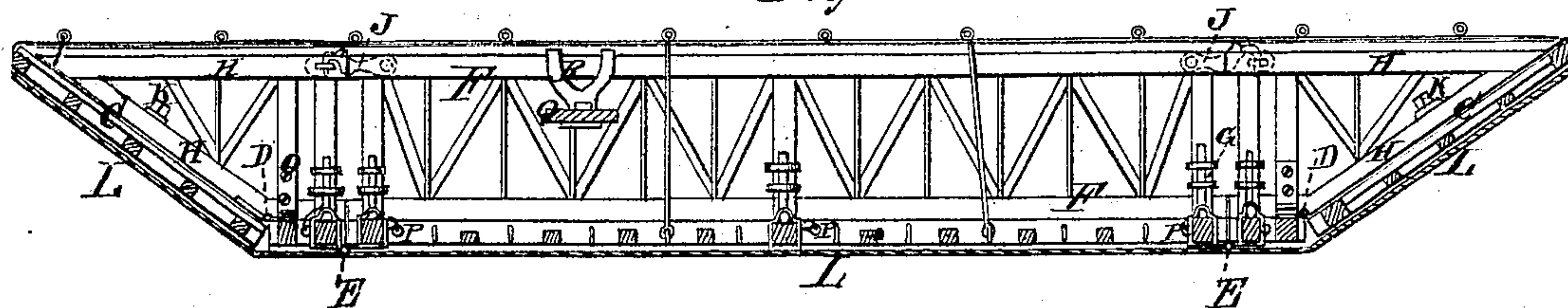


Fig. 2.

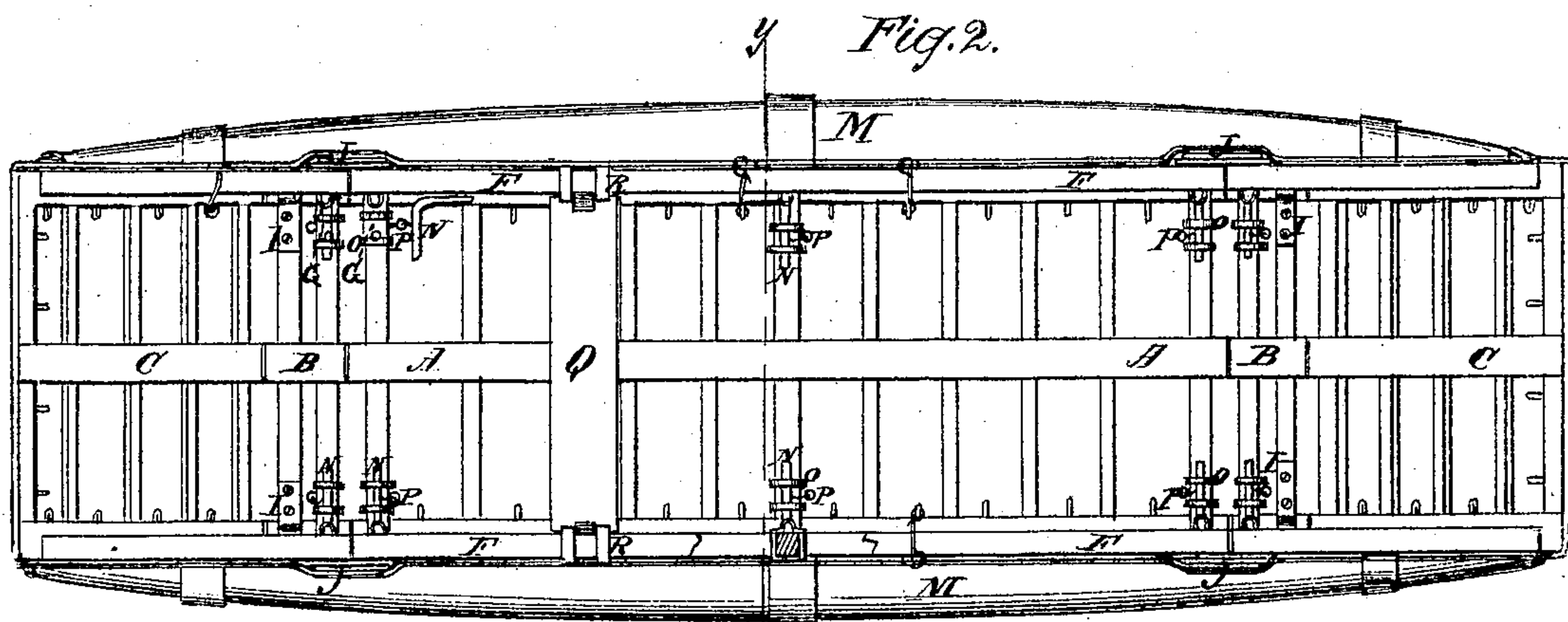


Fig. 3.

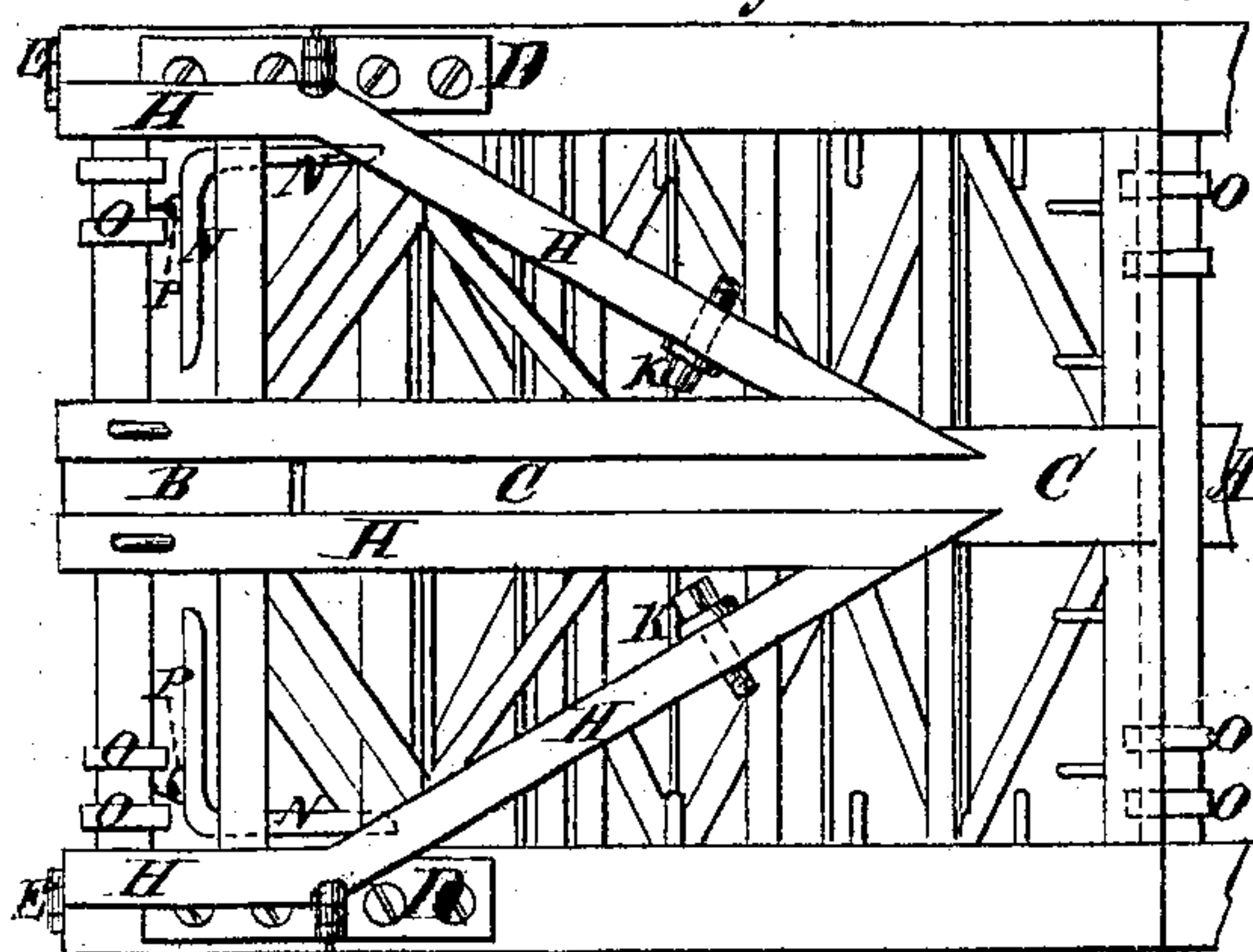


Fig. 4.

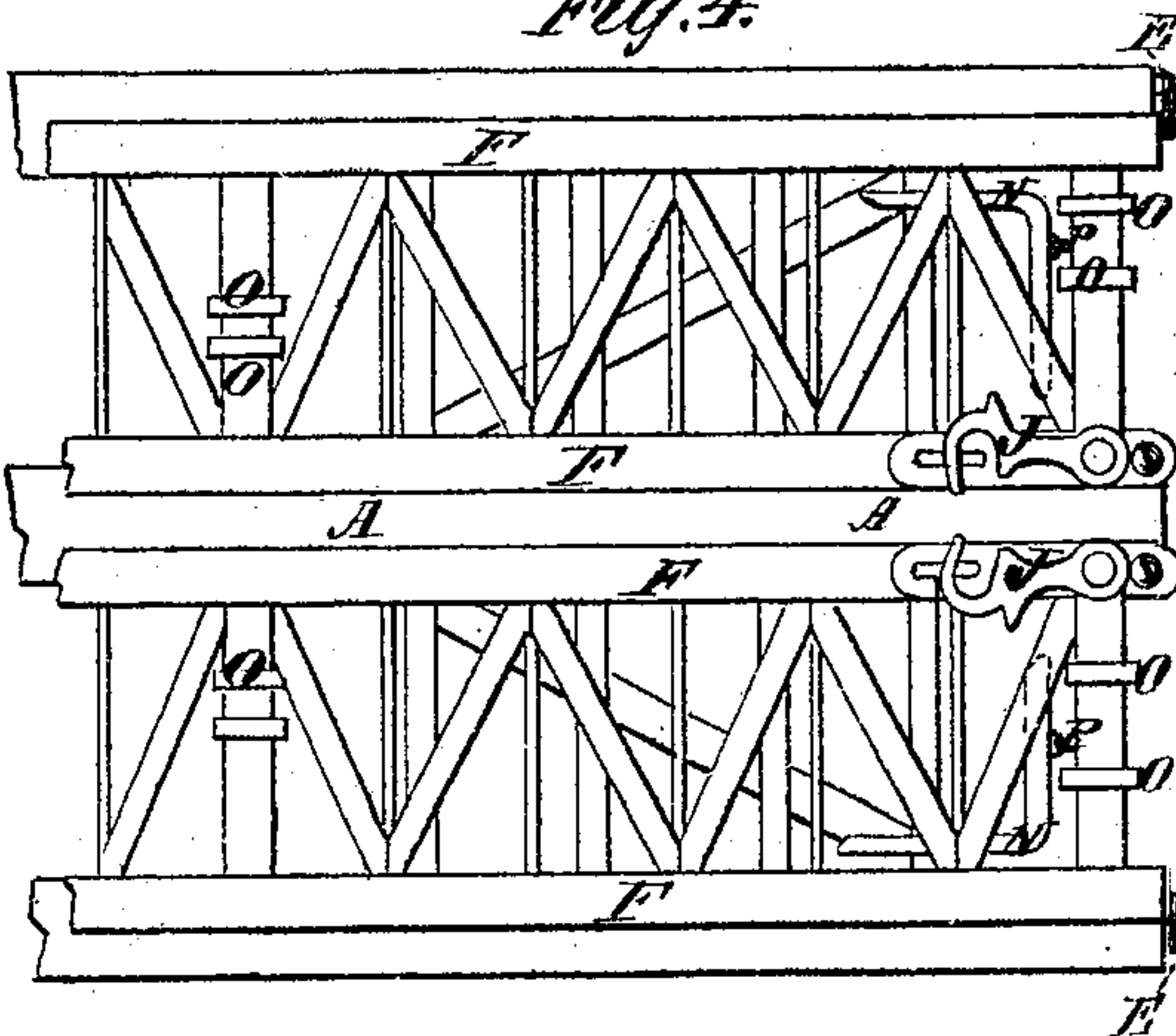


Fig. 5.

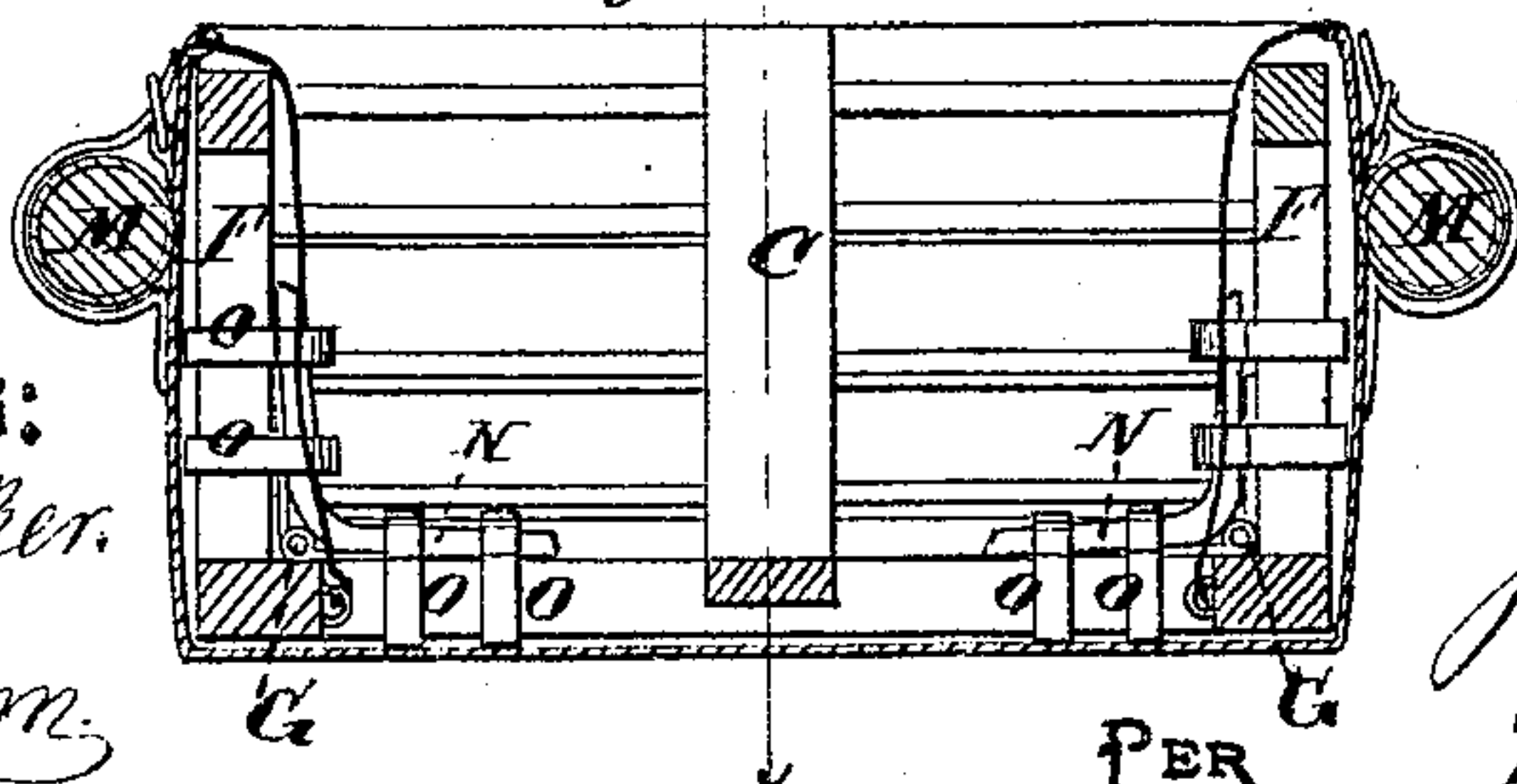


Fig. 6.



Witnesses:

John Brecher.
N. A. Graham.

Inventor:

John Hegeman.

Munn & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN HEGEMAN, OF VISCHER'S FERRY, NEW YORK.

IMPROVEMENT IN FOLDING-BOATS.

Specification forming part of Letters Patent No. 129,026, dated July 16, 1872.

Specification describing a new and useful Improvement in Portable Folding-Boat, invented by JOHN HEGEMAN, of Vischer's Ferry, in the county of Saratoga and State of New York.

Figure 1 is a vertical longitudinal section of my improved folding-boat. Fig. 2 is a top view of the same taken through the line *x x*, Fig. 5. Fig. 3 is a bottom view of one end of the boat folded. Fig. 4 is top view of the other end of the boat folded. Fig. 5 is a detail cross-section of the boat taken through the line *y y*, Fig. 2. Fig. 6 is a detail view of one of the seats.

Similar letters of reference indicate corresponding parts.

My invention has for its object to improve the construction of my pontoon-boat for which Letters Patent No. 64,103, were granted to me April 23, 1867, so as to make it more convenient in use, and more reliable and serviceable in operation, and adapt it for more general usefulness; and it consists in the use of certain stay or fastening devices with the hinged parts or sections of the boat, as hereinafter described.

A is the middle section of the bottom of the boat, which is formed of three longitudinal strips connected to each other by cross-bars, the end and middle ones of which are made heavier than the others, for strength, for the attachment of the hinges by which the side sections of the boat are connected with said bottom sections and for the attachment of the knees. B are the end sections of the bottom, and C are the sections that form the ends of the boat. The sections B C are constructed in the same manner as the section A, and are connected to each other by hinges D, so that the sections C may be turned up into an inclined position, as shown in Fig. 1. The sections B are connected with the ends of the section A by hinges E, so that the sections B C may be turned back together beneath the section A in folding the boat, as shown in Fig. 3, for storage or transportation. F are the central sections of the sides of the boat, which are made rectangular in form, and the longitudinal side-bars of which are connected and strengthened by braces inclined alternately in opposite directions, as shown in Figs. 1, 3, and 4. The sections F are further strengthened

by iron bolts passing through their side pieces. The sections F are connected with the section A of the bottom by hinges G, in such a manner that the side sections F may be folded down upon the section A, as shown in Fig. 4, for storage or transportation. H are the end sections of the sides of the boat, which are made in the same manner as the side sections F, except that the outer ends of the said sections H are inclined to give form to the end parts of the boat, as shown in Fig. 1, and except that they have two cross-bars at their inner ends, as shown in Figs. 1 and 3. The sections H are connected with the sections B of the bottom of the boat by hinges I, so that the sections H may be folded down upon the upper side of the sections B C, and with them turned beneath the section A of the bottom, as shown in Fig. 3, in folding the boat for storage or transportation. The side sections of the sides of the boat are secured to each other by straps and hooks J, which straps and hooks may be so arranged as also to secure said sections to each other when the boat is folded. The end sections C are secured to the inclined ends of the side sections by straps and hooks J and hand-bolts K either or both. The bottom and sides of the boat when in use are designed to be covered with a water-tight canvas cover, L. M are cylindrical floats which may be made tapering toward each end, and which are formed of a series of cork blocks cut into the proper form and covered with water-tight canvas. The pieces of cork may, if desired, be strung upon a wire or cord. The floats M are designed to be secured detachably to the cover L or sides of the boat by straps, ropes, or other convenient means. The connection between the side sections F H and the bottom sections A B are strengthened by small metallic knees N secured detachably to the larger cross-bars of the bottom sections A B, and to the straight cross-bars of the side sections F H, by sliding rings or bands O, as shown in Figs. 1, 2, 3, 4, 5. The knees N are also linked or hinged to the cross-bars of the bottom sections A B by eyes or hinges P, in such a way that when the rings O have been slipped from the ends of the knees N, the said knees may be turned down upon the said bottom sections A B, and the side sections F H turned down upon them in folding the boat. By this

arrangement the knees N will take up no useful space when the boat is folded, and will always be on hand and in the right place when required for use. Q are the seats, which are made of such a length as to fit between the side sections F H, and thus brace and stiffen the boat. To the ends of the seats Q are hinged straps R, which have hooks formed upon their upper ends to hook over the top side bars of the side sections F H to support the said seats. The hinges in the hook-straps R enable them to be folded down upon said seats, as shown in Fig. 6, so that the seats Q R may be packed in the space between the bottom section A and the side section F when

the boat is folded, so as to take up no available space, and so as to be always at hand and ready for use when required.

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

In the portable boat herein described, the knees N and the sliding rings O, in combination with the hinged or folding parts or sections, as and for the purpose specified.

JOHN HEGEMAN.

Witnesses:

JAMES T. GRAHAM,
T. B. MOSHER.