

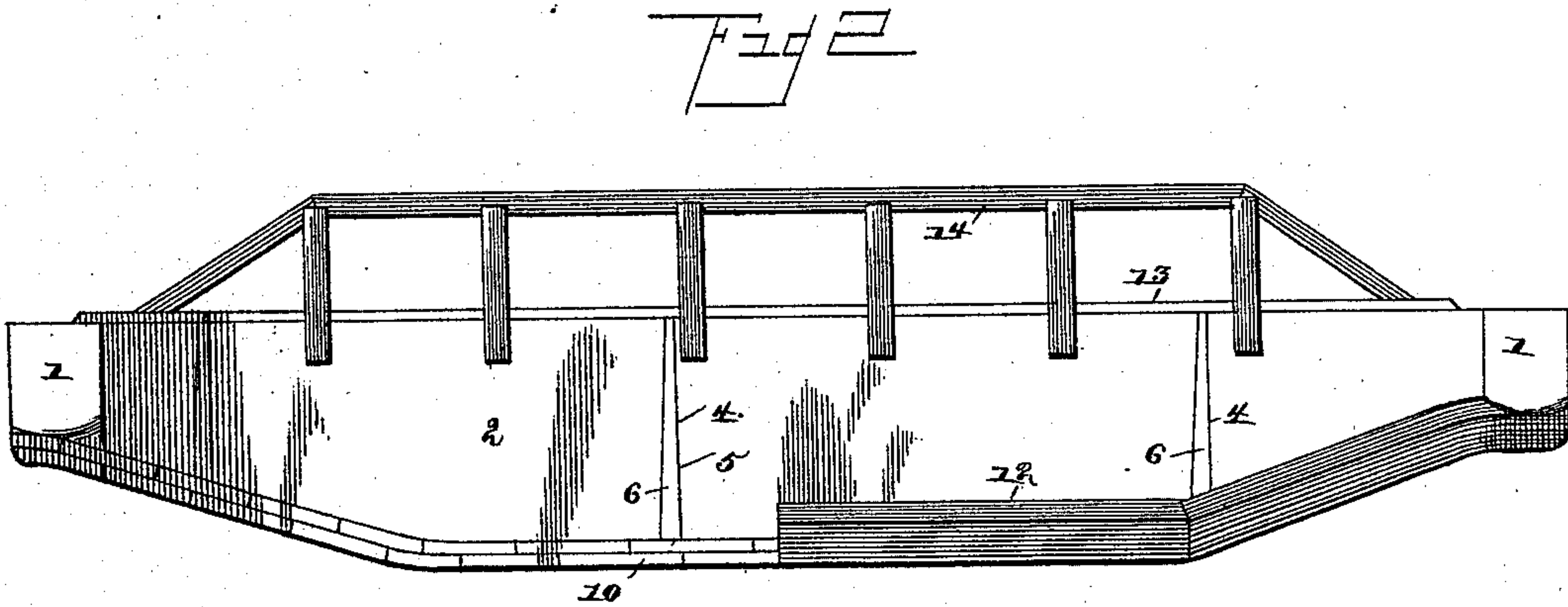
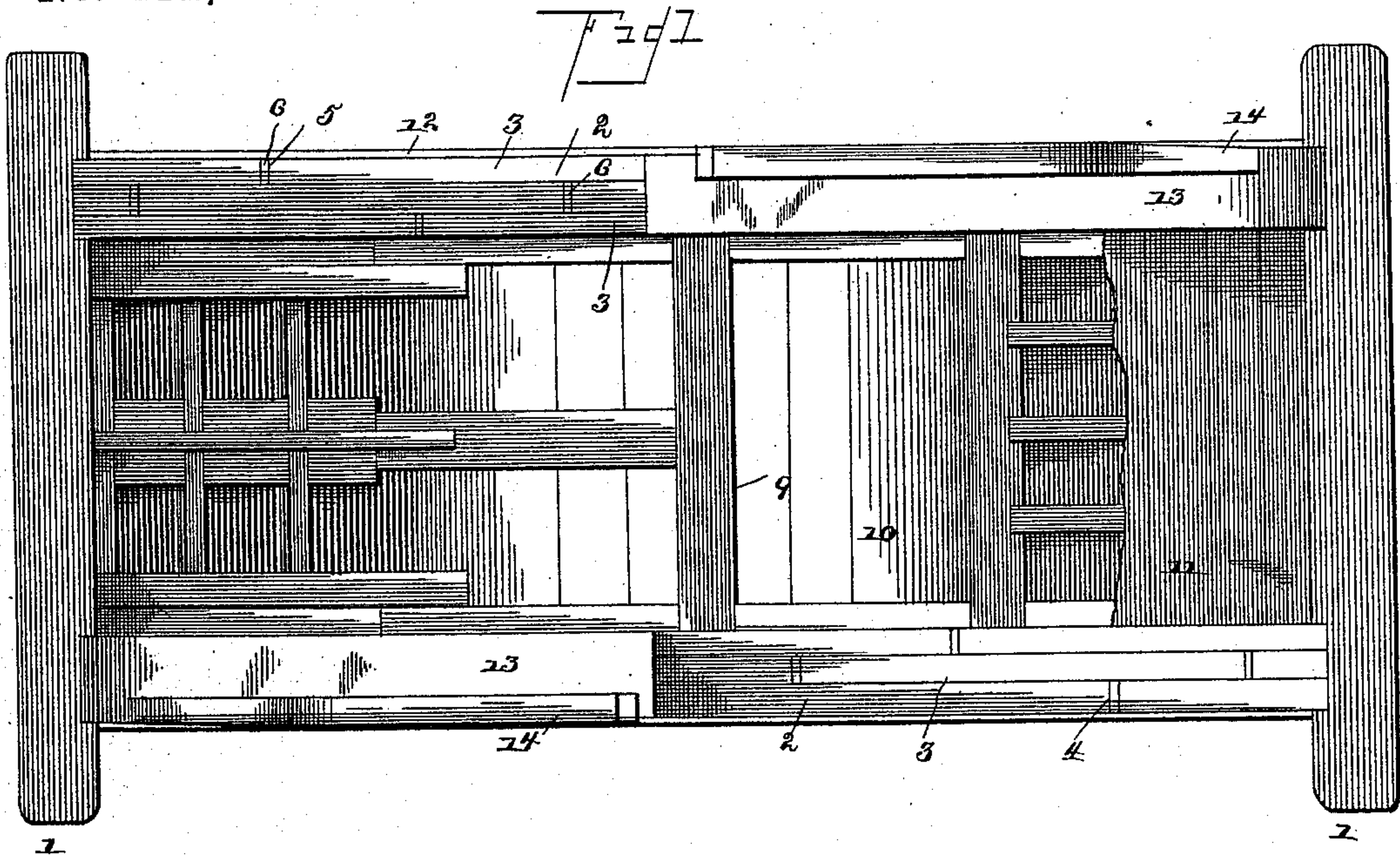
(No Model.)

2 Sheets—Sheet 1.

M. S. POOL.
FLAT BOTTOMED BOAT.

No. 412,413.

Patented Oct. 8, 1889.



Witnesses

John Amirie
Wm. Bagger

Inventor

Martin S. Pool

By his Attorneys,

C. A. Snow & Co.

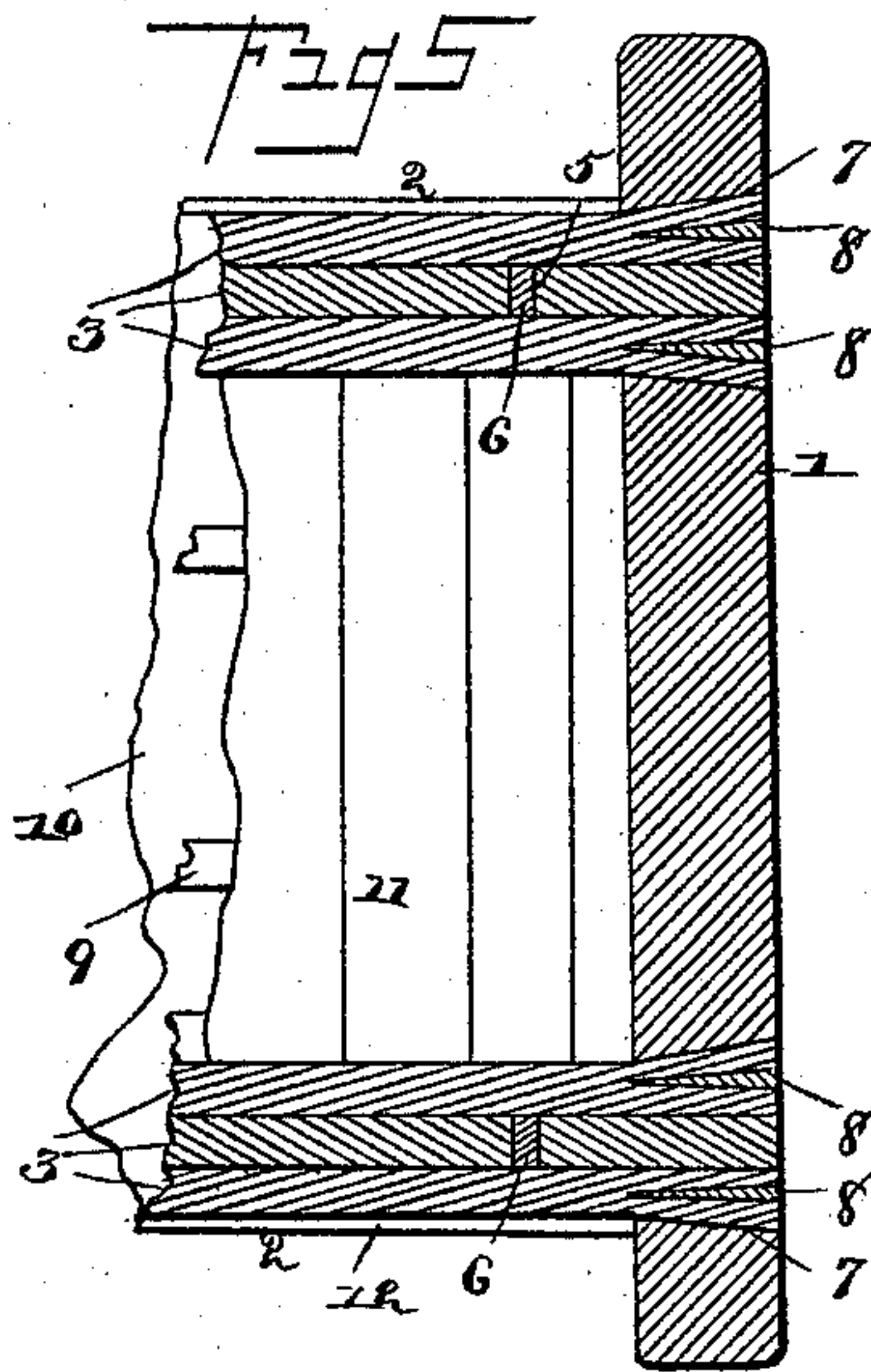
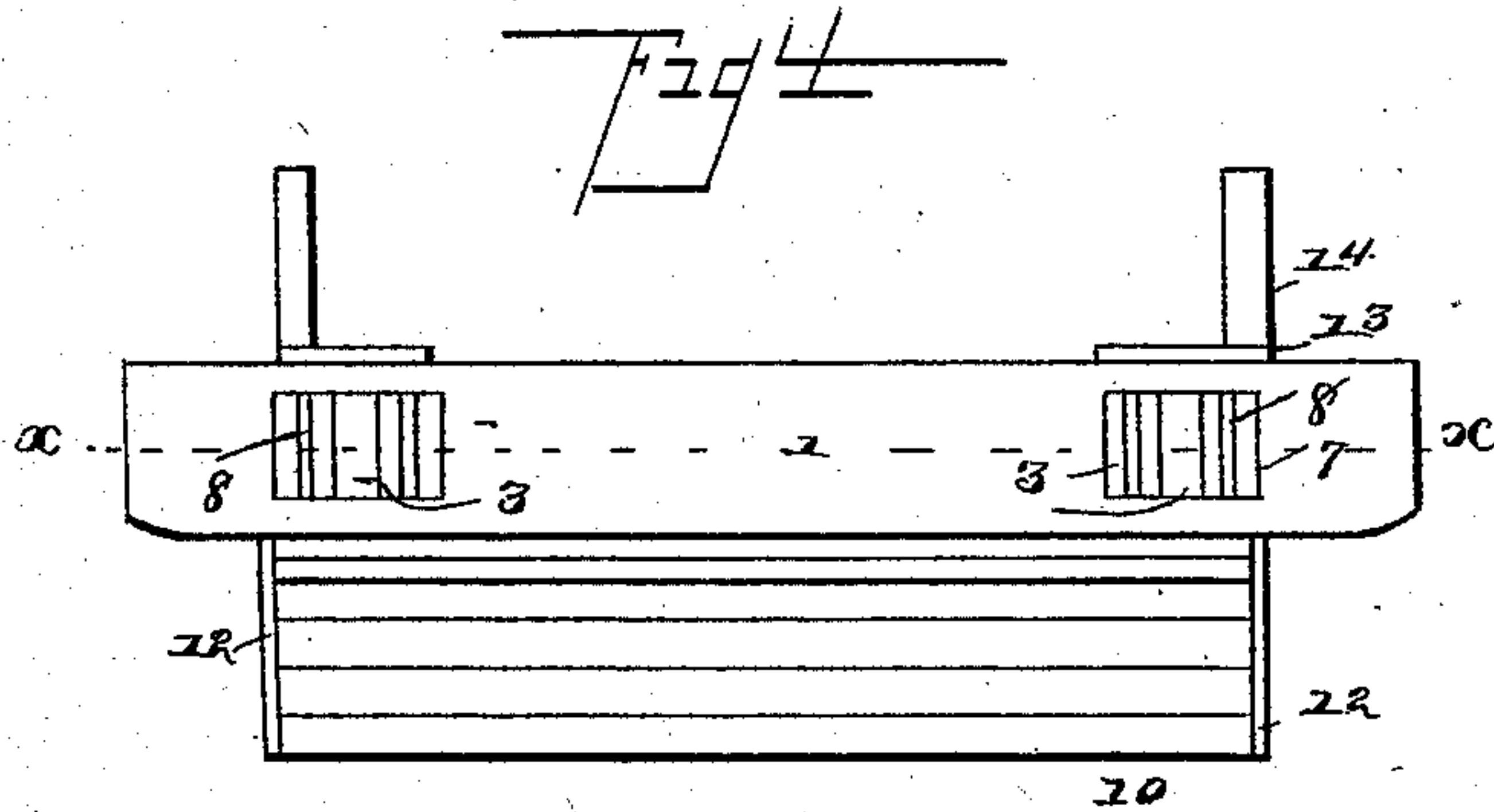
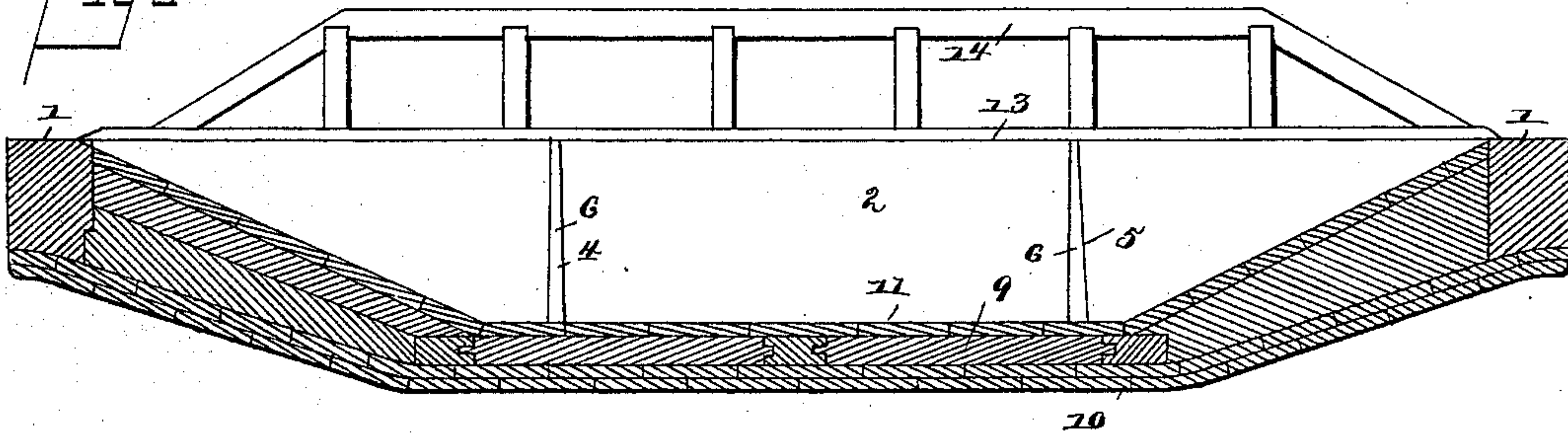
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UNITED STATES PATENT OFFICE.

MARTIN SHUFORD POOL, OF BUFORD, GEORGIA.

FLAT-BOTTOMED BOAT.

SPECIFICATION forming part of Letters Patent No. 412,413, dated October 8, 1889.

[Application filed June 28, 1889. Serial No. 315,851. (No model.)]

To all whom it may concern:

Be it known that I, MARTIN SHUFORD POOL, a citizen of the United States, residing at Buford, in the county of Gwinnett and State of Georgia, have invented a new and useful Flat-Bottom Boat, of which the following is a specification.

This invention relates to flat-bottom boats of that class which are used principally for ferrying purposes; and it has for its object to provide a boat of this class which may be easily and inexpensively constructed, and which shall possess superior advantages in point of strength and general utility.

The invention consists in the improved construction and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a plan view of my improved ferry-boat, a part of the flooring of the same having been removed. Fig. 2 is a side view of the same. Fig. 3 is a longitudinal sectional view. Fig. 4 is an end view. Fig. 5 is a horizontal sectional view taken on the line $x x$ in Fig. 4.

Like numerals of reference indicate like parts in all the figures.

The frame of my improved ferry-boat consists, essentially, of the head-blocks 1 1 and the side beams 2 2, forming the gunwales. The said side beams are each composed of a series of planks 3 3, placed closely together, with the ends of the planks of the several layers breaking joints with each other, as will be clearly seen by reference to the drawings, the said planks being firmly pinned or bolted together. The adjacent ends of the planks of each layer are beveled, as will be seen at 4, and a wedge-shaped space 5 is thus left at each joint. Into these spaces wedges 6 are driven from the under edges of the planks in an upward direction, thus making exceedingly tight and water-proof joints, and in an exceedingly simple and inexpensive manner.

The ends of the compound side beams 2 2 are tenoned to enter mortises 7 in the head-blocks 1 1. Said mortises are beveled outwardly, as will be seen in Fig. 5, and wedges 8 are driven into the tenoned ends of the side beams, which are thereby retained securely in the said mortises.

A flooring-frame 9 is suitably constructed

in the frame composed by the head-blocks and the side beams, and under the said flooring-frame is laid the bottom 10, which is composed of two layers of planks breaking joints with each other, so as to make a water-tight bottom without necessity for calking, said flooring-planks being nailed or otherwise secured directly to the flooring-frame, as well as to the compound side beams of the main frame. A floor 11 is laid upon the upper side of the flooring-frame, which latter is inclined at both ends in an upward direction to the upper edges of the head-blocks.

Longitudinal protecting-cleats 12 may be secured over the joints between the bottom planks and the side beams, and protecting-cleats 13 may likewise be arranged upon the upper edges of the gunwales. Rails 14 may likewise be suitably arranged to extend entirely or partly along the outer edges of the gunwales.

It has heretofore been customary to construct the side beams of the class of ferry-boats to which my invention belongs from a single log, and difficulty is frequently experienced in obtaining a perfectly sound log of the requisite size, and even when this can be had it can be shaped and put into place only with considerable trouble and expense. By my invention these difficulties are obviated, inasmuch as smaller pieces of plank are utilized in the construction of the side beams, which, when properly made according to my invention, will be found quite as durable and fully as strong as those constructed of a single log. By this method of construction I am also enabled to select the timber more carefully, using only the perfectly sound portions. By the herein-described method of constructing the side beam strong and water-tight joints are also secured.

The general construction of my improved ferry-boat is simple and comparatively inexpensive, and the boat will be found durable and useful in operation.

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

1. In a flat-bottom boat, the herein-described frame-beams, composed of several layers of planks breaking joints with each other, and having beveled ends, in combination with

wedges driven upwardly into the joints between the adjacent ends of the planks, substantially as set forth.

2. In a flat-bottom boat, the herein-described
5 frame-beams, composed of several layers of planks breaking joints with each other, and wedges driven upwardly into the joints between the adjacent ends of the planks, in combination with the head-blocks having mor-
10 tises to receive the tenoned ends of said side beams, and the bottom planks secured to the under sides of the side beams, thereby retaining the wedges in position in their respective joints, substantially as set forth.

15 3. The combination, with the head-blocks having outwardly-beveled mortises, of the side beams composed of several layers of planks breaking joints with each other, and having tenoned ends entering the said mor-
20 tises, and the wedges driven into the outer ends of said tenons, substantially as set forth.

4. The combination of the head-blocks, the side beams composed of several layers of planks breaking joints with each other and
25 having wedges driven upwardly into the joints between the adjacent ends of the planks, the bottom frame, the bottom planks

secured to the under side of the latter and to the lower edges of the side beams, and the floor laid upon the upper side of the said
30 flooring-frame, substantially as set forth.

5. In a flat-bottom boat, the combination of the mortised head-blocks, the tenoned side beams composed of several layers of planks breaking joints with each other, and having
35 wedges driven upwardly into the joints between the adjacent ends of the planks, the flooring - frame, the two layers of bottom planks secured to the latter and to the lower edges of the side beams and breaking joints
40 with each other, the guard-cleats secured over the joints between the bottom planks and the side beams and on the upper edges of the latter, the floor and the railings, all arranged and operating substantially as and for
45 the purpose herein shown and specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

MARTIN SHUFORD POOL.

Witnesses:

S. J. PATILLO,

W. S. DANSBY.