No. 724,757. PATENTED APR. 7, 1903.

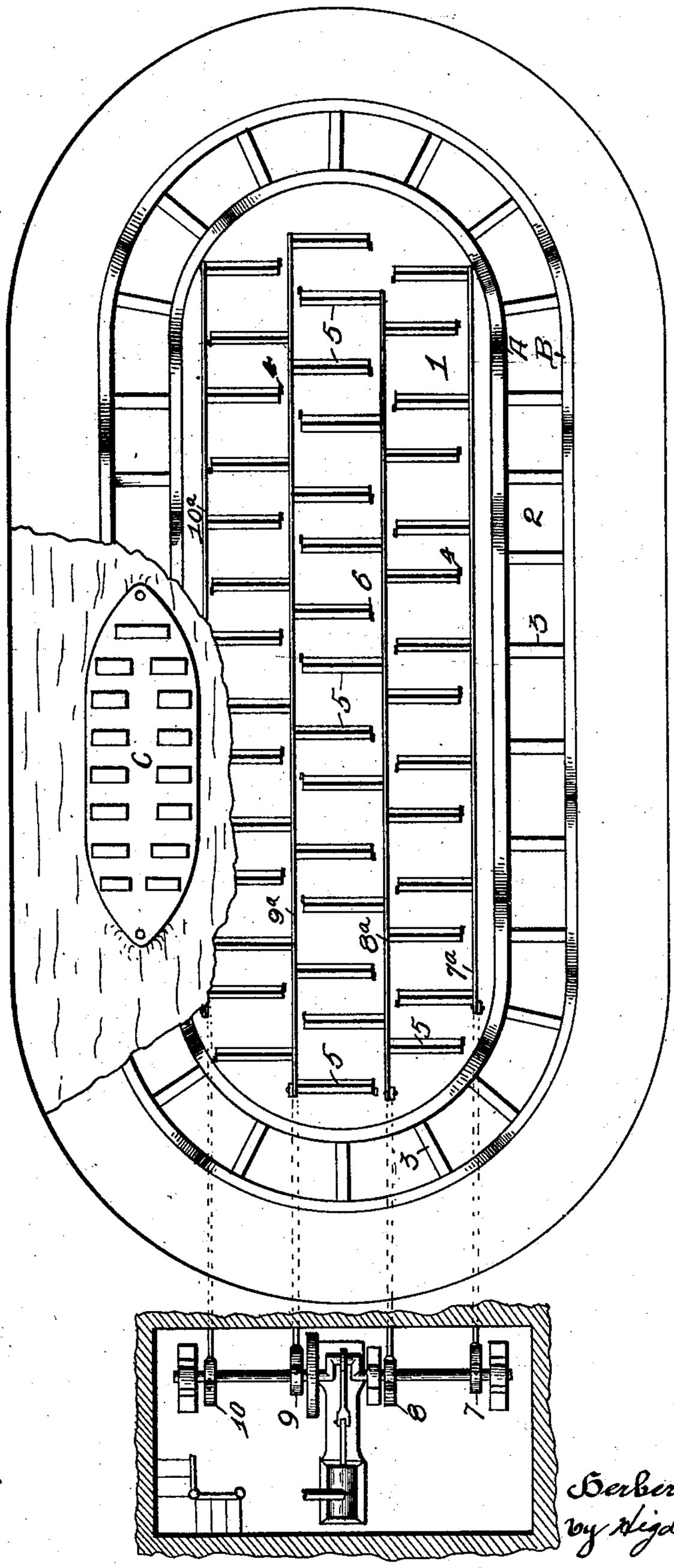
H. SYMONDS.

AMUSEMENT DEVICE.

APPLICATION FILED JAN. 26, 1903.

NO MODEL. 4 SHEETS—SHEET 1.

Fig. 1.



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NO MODEL. 4 SHEETS—SHEET 2.

Fig. 2.

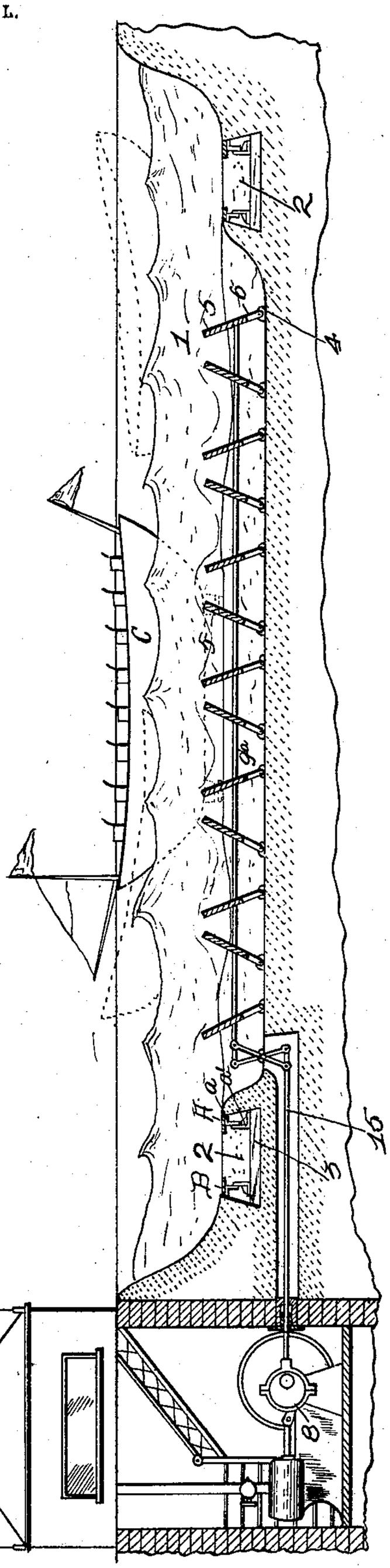
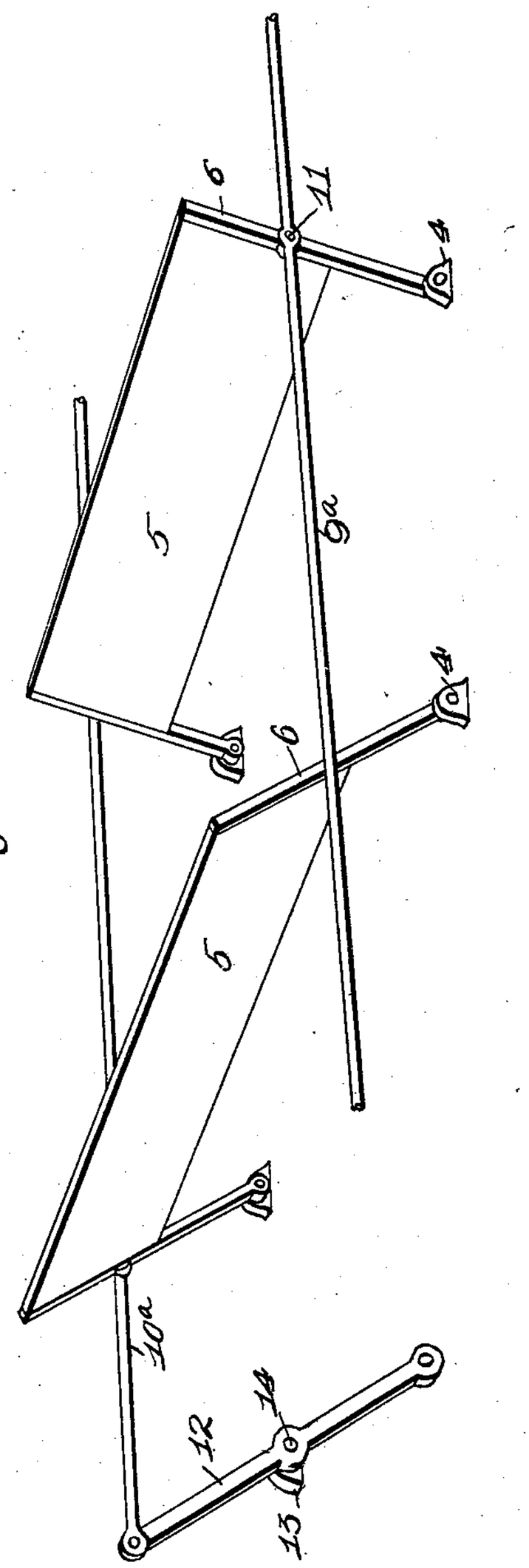


Fig. 3.



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AMUSEMENT DEVICE.

APPLICATION FILED JAN. 26, 1903.

NO MODEL. 4 SHEETS—SHEET 3.

Fig. 4

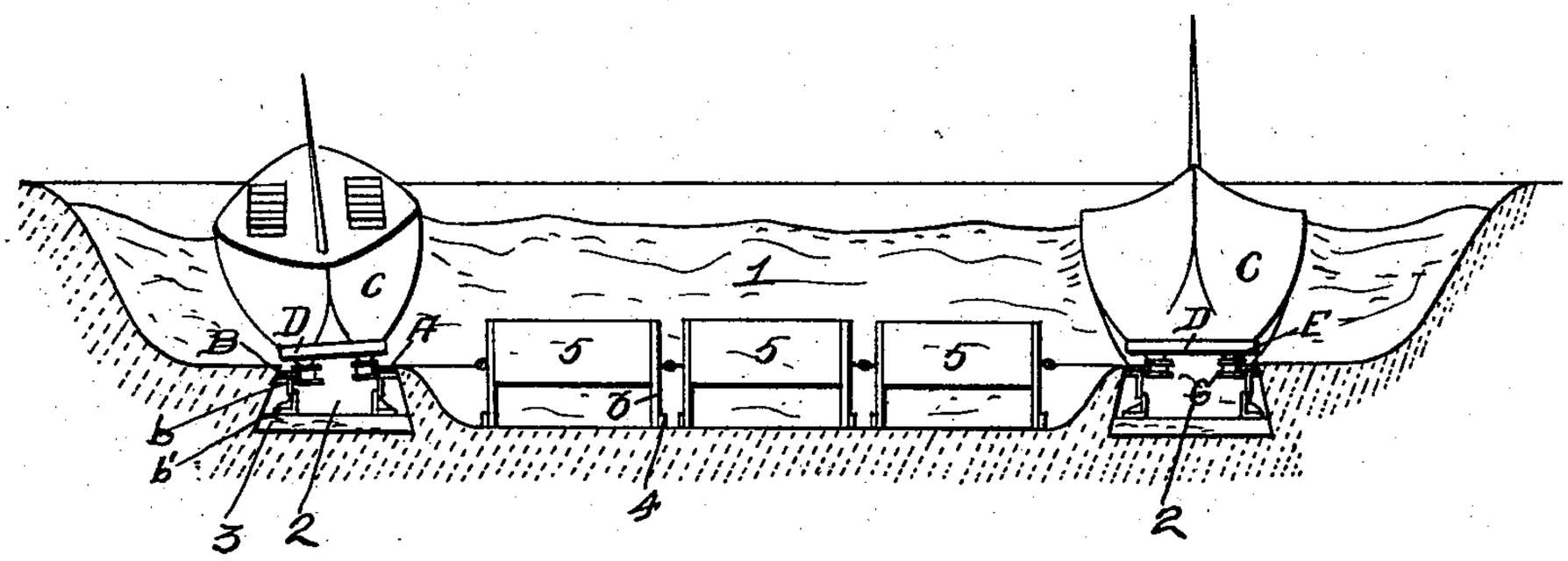
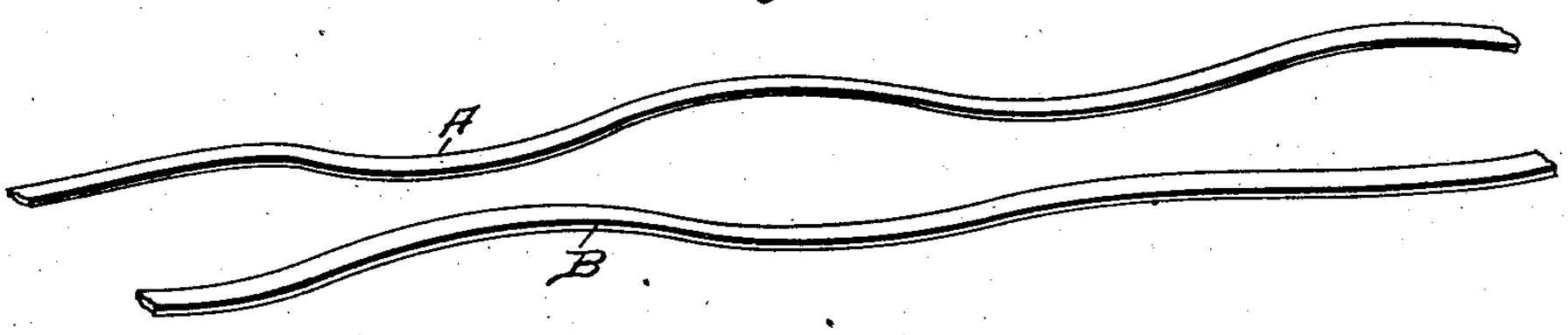


Fig. 5



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No. 724,757. PATENTED APR. 7, 1903.

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AMUSEMENT DEVICE.

APPLICATION FILED JAN. 26, 1903.

NO MODEL. 4 SHEETS—SHEET 4

Fig. 6

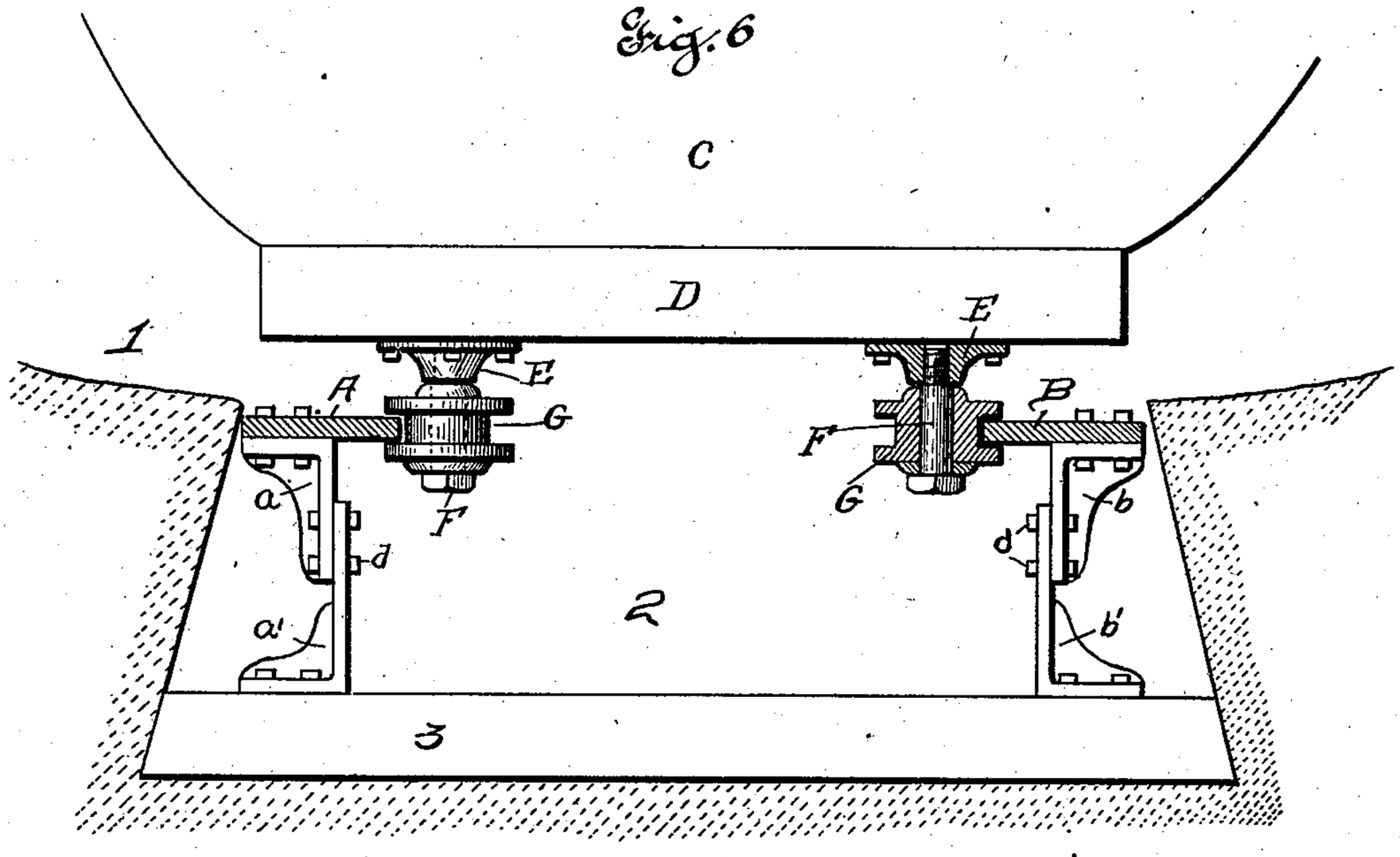
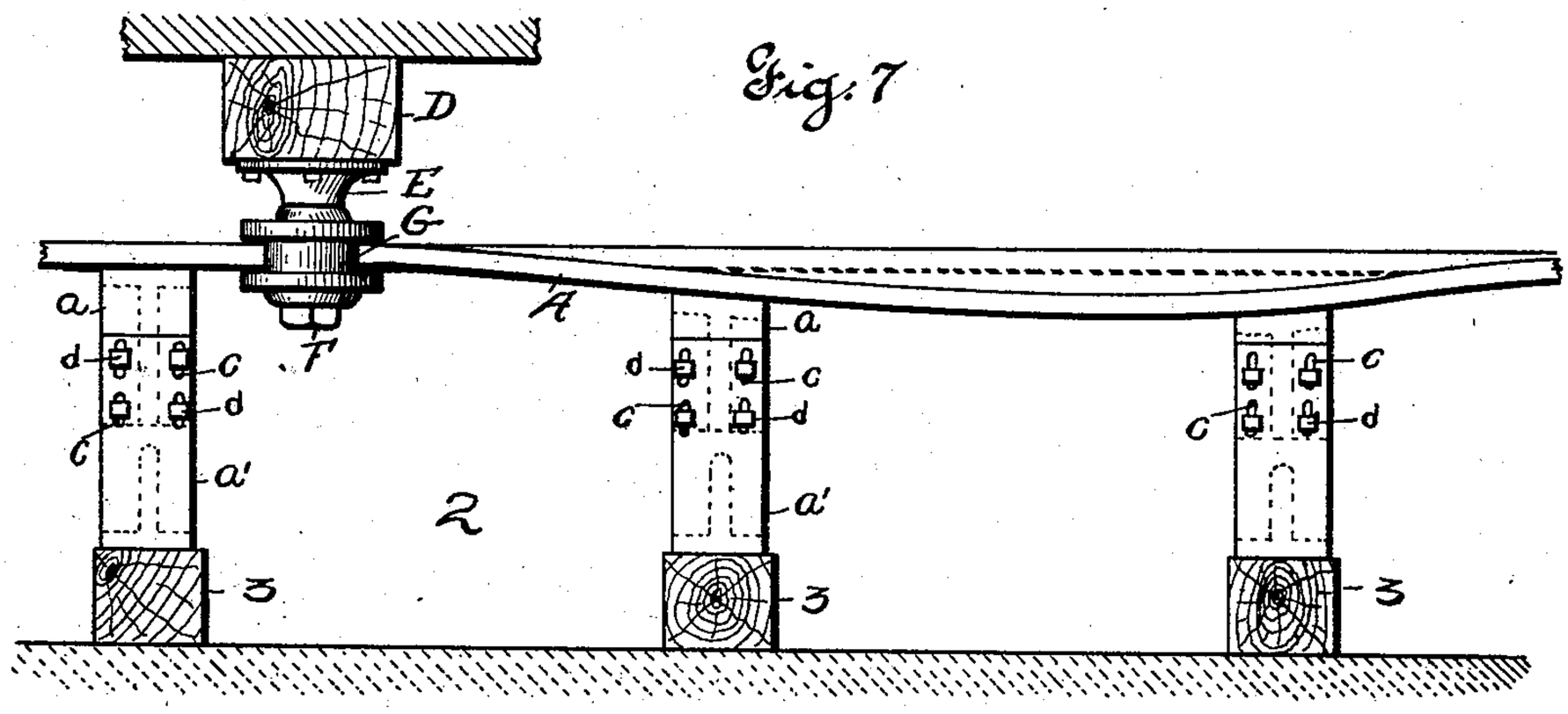


Fig. 7



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UNITED STATES PATENT OFFICE.

HERBERT SYMONDS, OF EAST ST. LOUIS, ILLINOIS, ASSIGNOR OF ONE-HALF TO LINUS B. CARROLL, OF ST. LOUIS, MISSOURI.

AMUSEMENT DEVICE.

SPECIFICATION forming part of Letters Patent No. 724,757, dated April 7, 1903.

Application filed January 26, 1903. Serial No. 140,500. (No model.)

To all whom it may concern:

Be it known that I, HERBERT SYMONDS, of the city of East St. Louis, St. Clair county, State of Illinois, have invented certain new and useful Improvements in Amusement Devices, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in amusement devices, and has for its object to provide means for agitating a body of water to produce wave motion therein and means whereby vessels may be propelled through such body of water with rolling and pitch-and-toss movements.

In the drawings, Figure 1 is a plan view of a device embodying my invention. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a perspective of the blades used in producing the desired wave motion. Fig. 4 is a vertical transverse sectional view of a device embodying my invention. Fig. 5 is a perspective of the guide-tracks used in imparting motion to the vessel. Fig. 6 is an enlarged transverse sectional view of said guide-tracks, showing their means of support and the vessel carried by them. Fig. 7 is a side view of one of said guide-tracks, showing its curvature and the accommodation of its means of support to said curvature.

My invention in that embodiment which is shown in the drawings consists of a lake or basin 1, having an excavation 2, adapted to receive cross-ties 3. Upon the cross-ties 3 the guide-rails A B are mounted horizontally by means of brackets *a a' b b'*. The guide-rails A B are irregularly curved, as shown in Fig. 5, so that the depressions in A are opposite to elevations in B. To accommodate the brackets *a a' b b'* to the curvature of the rails, I have provided said brackets with slots *c*, whereby the brackets *a* and *a'* and *b* and *b'* are vertically adjustable, and when adjusted they are fixed by tightening the bolts *d*.

The vessel C is provided with any desired motive power, exterior or self-contained, is preferably flat-bottomed, and is preferably provided with sills D.

It is one of the objects of my invention to control the motion of the vessel C by means of the rails A B, so as to impart thereto the motions of a ship at sea, both pitching, tossing, and rolling. These movements are predetermined and provided for by the varying relative curvature of the tracks A B, and the preferred means of so guiding the vessel C by the rails A B as to make its movements conform thereto, which is shown in the drawings, I have effected in the following manner: Upon the sills D, I have provided the bearings E, threaded to receive the ends of the axles F. The double-flanged wheels G are mounted on the axles F in such manner that the flanges are above and below the inner edges of the guide-rails A B.

The illustrated means of producing wave motion in the water through which the vessel passes may be described as follows: The bottom of the basin 1 is provided with lugs 4. The blades 5 are mounted on standards 6, which standards 6 are pivotally mounted upon the lugs 4. As indicated in plan view in Fig. 1 and in enlarged detail in Figs. 2 and 3, the blades 5 are parallel, but staggered, so that their motion may be oppositely directed. Thus the blades 5 being arranged as shown in Fig. 1 they are actuated by the movement of eccentrics 7, 8, 9, and 10, to which they are connected by means of rods 7^a, 8^a, 9^a, and 10^a, to which blades 5 are pivotally attached by means of pins 11, the blades 5 being laterally connected to the rods actuating them upon opposite ends. Motion is imparted to the rods 7^a, 8^a, 9^a, and 10^a through the bars 12, which extend through the bottom of the basin and are pivotally mounted therein by means of the lugs 13 and pins 14, the lower ends of the levers 12 being connected to the eccentrics 8, 9, and 10 by means of the rods 15.

It is obvious that my device can be applied to a basin of any size and may contain vessels of any desired size, and my invention is, in fact, adapted and intended to be used both upon a small scale, as a toy, and upon a large scale, for the conveyance of passengers at expositions and the like.

Having thus described my invention, what I claim as new, and desire to have secured to me by the grant of Letters Patent, is—

1. In an amusement device, a basin, a body of water contained in the basin, a vessel adapt-

ed to be propelled through the water, and an irregular curved guiding-surface mounted upon and within the basin and below the surface of the water whereby rolling and pitch-and-toss motion may be imparted to the vessel, substantially as described.

2. In an amusement device, a basin, a body of water contained in the basin, a vessel adapted to be propelled through the water, and irregular, curved guiding-surfaces mounted upon and within the basin and below the surface of the water whereby rolling and pitch-and-toss motion may be imparted to the vessel, substantially as described.

3. In an amusement device, a basin, a body of water contained in the basin, a vessel adapted to be propelled through the water, irregular curved guiding-surfaces mounted upon and within the basin and below the surface of the water and means whereby the vessel may be slidably connected to the bottom of the basin for the purpose of causing it to roll, pitch and toss, subtantially as described.

4. In an amusement device, a basin, a body of water contained in the basin, a vessel adapted to be propelled through the water, irregular curved guiding-surfaces mounted upon and within the basin and below the surface of the water and means for imparting wave motion to the water, substantially as described.

5. In an amusement device, a basin, a body of water contained in the basin, a vessel adapted to be propelled through the water, an irregular curved guiding-surface mounted upon and within the basin and below the surface of the water, means whereby rolling and pitch-and-toss motion may be imparted to the vessel and means for imparting wave motion to the water, substantially as described.

6. In an amusement device, a basin, a body of water contained in the basin, a vessel adapted to be propelled through the water, an irregular curved guiding-surface mounted upon and within the basin and below the surface of the water whereby rolling and pitch-and-toss motion may be imparted to the vessel and means for imparting wave motion to the water, substantially as described.

7. In an amusement device, a basin, a body of water contained in the basin, a vessel adapted to be propelled through the water, irregular curved guiding-surfaces mounted upon and within the basin and below the surface of the water, means whereby the vessel may be slidably connected to the bottom of the basin for the purpose of causing it to roll, pitch and toss and means for imparting a wave motion to the water, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HERBERT SYMONDS.

Witnesses:

JAMES L. HOPKINS,

ALFRED A. EICKS.