

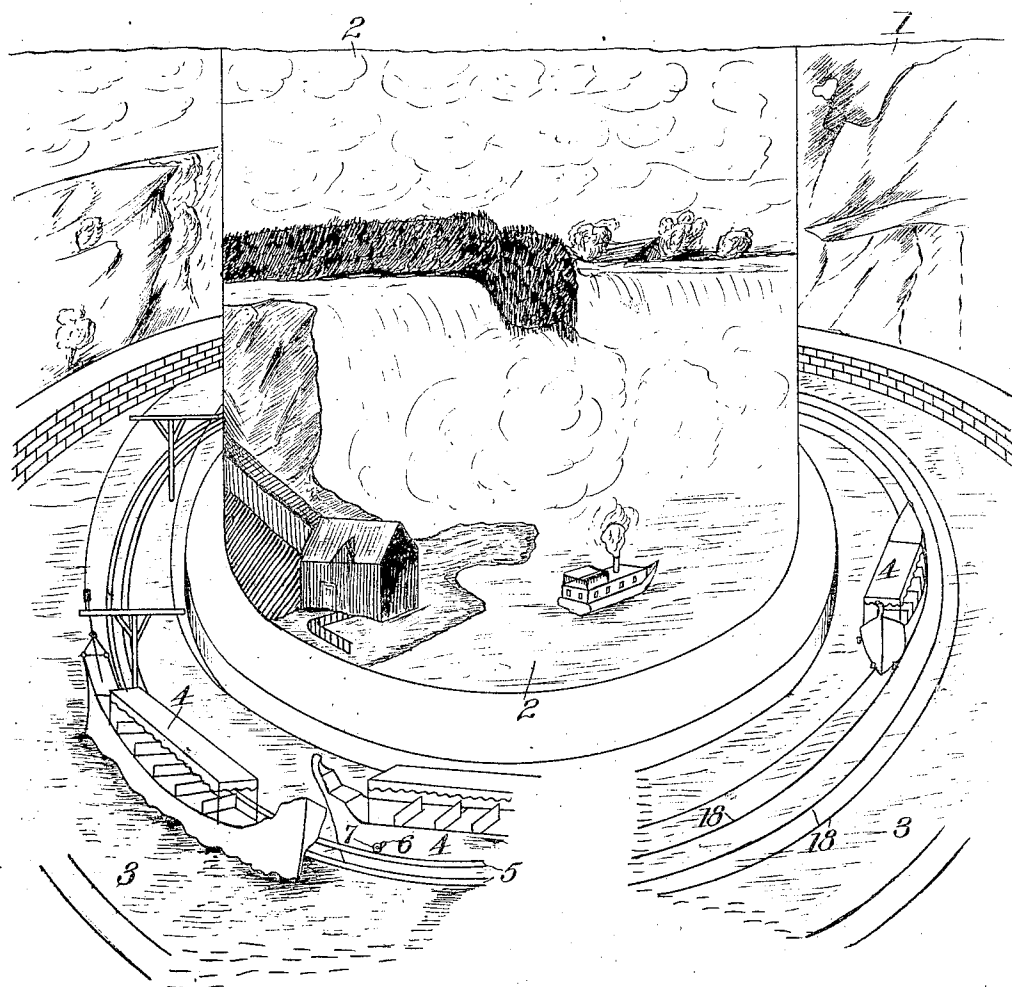
No. 862,157.

PATENTED AUG. 6, 1907.

H. HEALY.  
AQUATIC MERRY-GO-ROUND.  
APPLICATION FILED AUG. 3, 1906.

3 SHEETS—SHEET 1.

*Fig. 1.*



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Witnesses

*C. H. Walker*

*J. T. Walker*

By

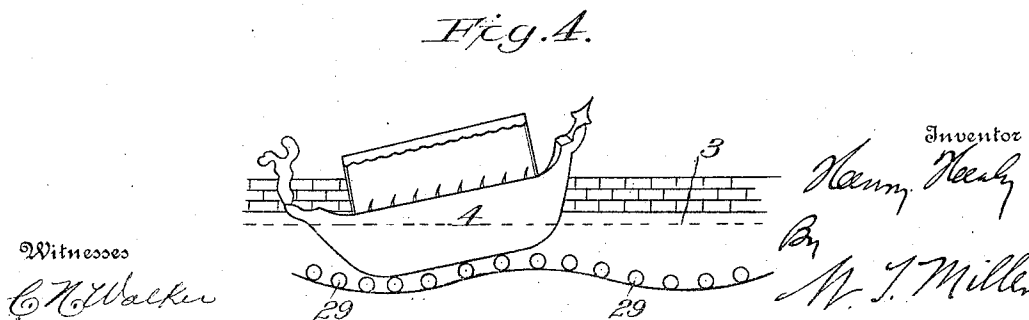
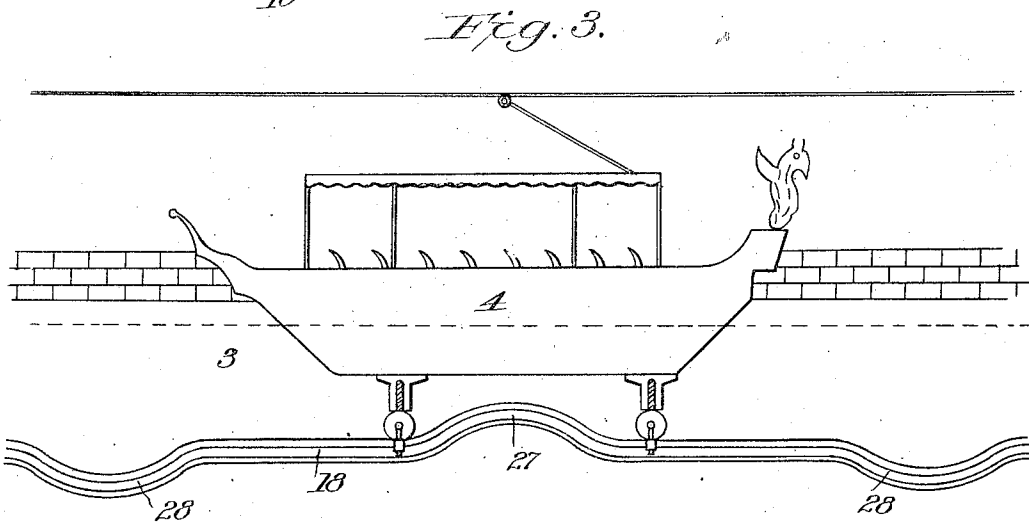
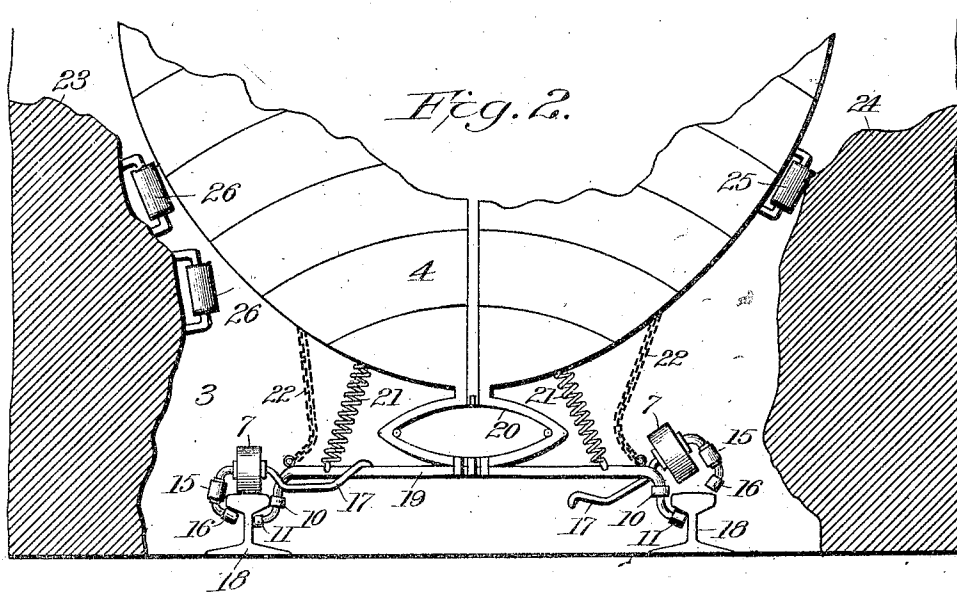
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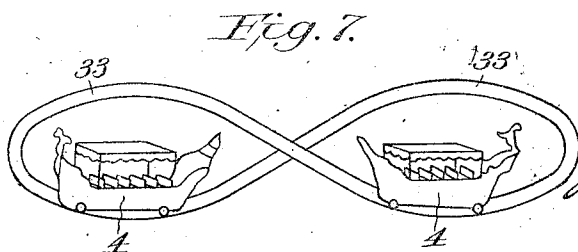
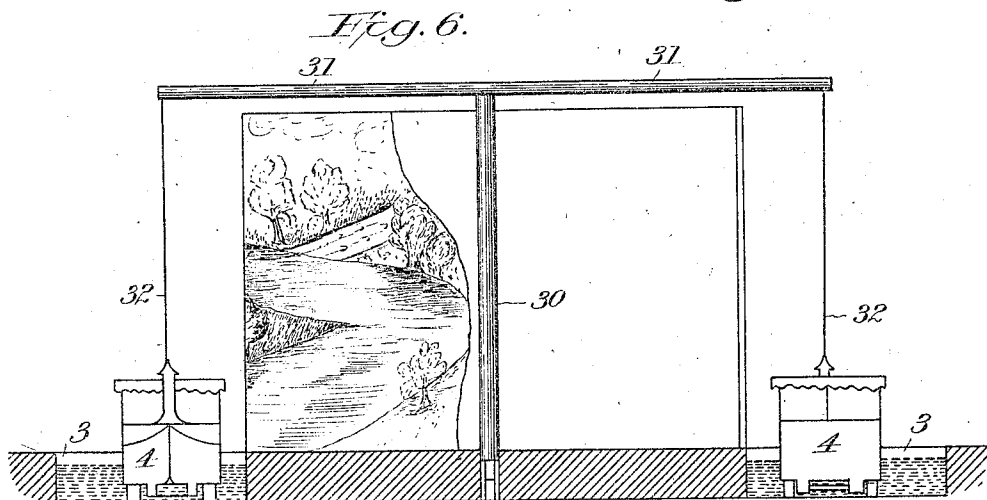
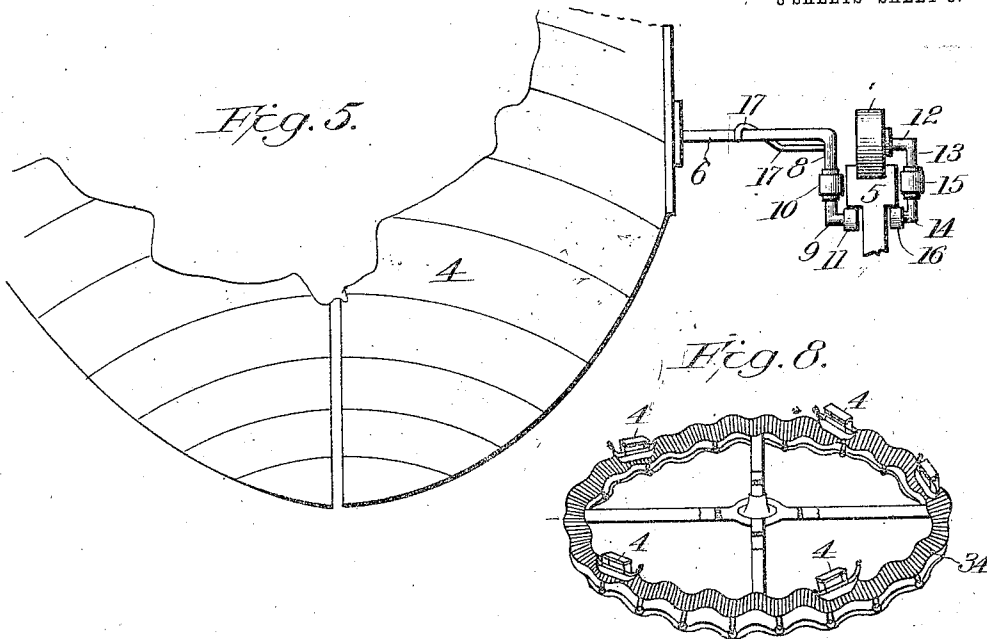
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3 SHEETS—SHEET 3.



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# UNITED STATES PATENT OFFICE.

HENRY HEALY, OF BUFFALO, NEW YORK.

## AQUATIC MERRY-GO-ROUND.

No. 862,157.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed August 3, 1906. Serial No. 329,054.

*To all whom it may concern:*

Be it known that I, HENRY HEALY, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Aquatic Merry-Go-Rounds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention consists of an aquatic merry-go-round, or in other words a combination of novel features by means of which a pleasure trip is provided in a boat, which travels in a fixed course through a waterway, both sides of which are made to represent a particular locality.

In carrying out my invention I make use of a system of canal propulsion, for which Letters Patent No. 738,190 were granted to me on the 8th. day of September, 1903, such system involving broadly, a waterway, a guide-rail in the line of the waterway and connections on the boat for holding engagement with the guide-rail, in their travel along the same.

The object of my invention, primarily, is to simulate a trip of "The Maid of the Mist" in the Niagara river, or a trip through the "Rapids and Whirlpool," or any other localities of a similarly interesting or exciting character. These features are to be located at the midways of world's fairs, or at permanent pleasure resorts, for catering to the entertainment of the public. Both the surrounding scenery and the travel upon the water are to be reproduced in a realistic manner and as nearly true to nature as is possible with artistic and mechanical means, which include running and falling water and the rolling and tossing of the boats.

My invention therefore consists broadly of a waterway, preferably circular or endless, a series of boats for travel in such waterway, a guide-rail or rails in such waterway, either above the surface of the water or on the bottom of the waterway, for causing the boats to travel in a fixed path, by means of arms upon the boats and in holding engagement with the guide-rail or rails, along which the arms travel, suitable power for propelling the boats in a direction parallel to the guide-rail or rails, raised sections in the bottom of the waterway, over which the boats are caused to ride in simulating the action of the tossing water of the Whirlpool Rapids and other necessary features for accurately producing the natural scenery of the locality sought to be represented.

In the drawings, Figure 1 is a perspective view of my aquatic merry-go-round. Fig. 2 is a front elevation of a boat with necessary features for travel along a track upon the bottom of the waterway. Fig. 3 is a side ele-

vation of a boat traveling along undulating rails on the bottom of the waterway. Fig. 4 shows a modified form of the bottom of the waterway, in which the bottom is of undulating form and provided with friction rollers over which the boat is caused to pass. Fig. 5 is a fragmentary detail illustrating the application of guiding boats, as covered by my Letters Patent herein named. Fig. 6 illustrates a modified form of propelling the boats. Fig. 7 illustrates the application of my improved system to a figure eight track. Fig. 8 illustrates a movable track with boats secured thereto at intervals, such track and the boats thereon having an undulating or rolling motion.

Referring to the drawings, 1 is the outer cylindrical wall and 2 the inner cylindrical wall, forming an annular space in which is arranged the circular waterway 3, around which the pleasure boats 4 are to be propelled in opposite directions, as shown in Fig. 1.

On the left of Fig. 1 are shown the guide-rails 5, 5, which are centrally arranged along the waterway 3, and upon the sides of each boat are arranged the vertically adjustable arms 6 (see Figs. 1 and 5) carrying at their outer ends the friction-wheels 7, for holding engagement with the guide-rails 5, in their travel along the same.

In order to hold the friction-wheel 7 in engagement with the guide-rails 5, I have provided the following construction. At the outer end of the arm 6, are the downwardly extending and inwardly extending arms 8 and 9, respectively carrying the anti-friction rollers 10 and 11, which bear against the side and under surfaces of the guide-rail 5. Hinged to the arm 6 is the horizontal arm 12, upon which is pivoted the friction-roller 7, which has bearing contact with the tread of the guide-rail 5.

At the outer end of arm 12 are the downwardly extending and inwardly extending arms 13 and 14, respectively carrying the anti-friction rollers 15 and 16, which bear against the side and under surfaces of the guide-rail 5.

17 is a spring catch-arm rigid with the arm 12 and adapted for removable engagement with the arm 6, for holding the anti-friction device on the rail 5 or for releasing the same.

In Fig. 2 I illustrate the manner of propelling the boat 4 along two rails 18, 18, on the bottom of the waterway 3, as shown on the right-hand side of Fig. 1. The bottom of the boat, at each end, is provided with the axle 19, having the spring 20 interposed between it and the boat. 21, 21, are stiff spiral springs secured to the boat 4 and axle 19 and 22, 22, are loose chains connecting the boat with the outer ends of the axles. On the right-hand side is shown the anti-friction device disengaged from the rail. On each side of the waterway, at intervals, I construct the projecting obstructions 23 and 24, against which the boat strikes, to give it a

rolling motion in its travel, against the action of the springs 21, the chains 22 limiting the rolling of the boat from side to side. Friction-rollers 25 on the side of the boat or friction-rollers 26 on the side of the obstruction 23, prevent the injurious scraping of the boat and the rollers 25, 26 may be made of rubber to ease the jar.

In Fig. 3 I have shown the rails 18 with rises 27 and depressions 28, to give to the boat a pitching motion in its travel.

Fig. 4 shows a modification of the above construction, in which the rails are replaced by friction-rollers 29 extending across the waterway and up and down the rises and depressions.

The power which I preferably employ is the trolley system shown in Fig. 1, but in lieu thereof a central shaft 30 (see Fig. 6) with radial arms 31 may be substituted, the outer ends of which are connected with the boats 4 by the lines 32.

In Fig. 7 I have shown a modification in which the track is in the form of a figure eight, as at 33 and in Fig. 8 I have shown another modification in which the boats 4 are secured to an endless flexible track 34, which is caused to move in an undulating motion, to simulate the pitching of the waves.

The trip represented in Fig. 1 is that of the "Maid of the Mist" below the falls and the travel of the boat is on a level track, as shown.

If a trip through the "Rapids" and "Whirlpool" is to be represented, the scenery is to be correspondingly changed. The rises 27 and depressions 28 (see Fig. 3) and the obstructions 23, 24 (see Fig. 2) are also to be

utilized, in which event the boat will pitch on the uneven rails and strike the side obstructions, thus giving the boat a pitching and rolling motion in imitation of a trip through the wave-tossed "Rapids."

I claim.

1. In an amusement device, a water-way, guiding means in the water-way, a boat for travel in the water-way, and spring controlled means detachably connecting the boat to the guiding means.

2. In an amusement device, a water-way, guiding means in the water-way, and means detachably connecting the boat to the guiding means, the connecting means including antifriction rollers and a spring connection.

3. In an amusement device, a water-way arranged between walls, a guiding means in the water-way, a boat for travel in the water-way, means detachably connecting the boat to the guiding means and means carried by the side of the boat to contact with said walls.

4. In an amusement device, a water-way arranged between walls, a guiding means in the water-way, a boat for travel in the water-way, spring controlled means connecting the boat and the guiding means, and means carried by the sides of the boat to contact with the walls along the water-way.

5. In an amusement device, a water-way arranged between walls, guiding means in the water-way, said guiding means having an uneven surface to rock the boat longitudinally of its length, means detachably connecting the boat to the guiding means, and means carried by the boat for engagement with said walls to rock the boat from side to side, and means for propelling the boat along said guiding means.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

HENRY HEALY.

Witnesses:

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JOHN O. ADSIT.