W. E. MILLER.

AMUSEMENT DEVICE.

APPLICATION FILED JAN. 12, 1916.

1,195,707.

Patented Aug. 22, 1916.

3 SHEETS—SHEET 1.

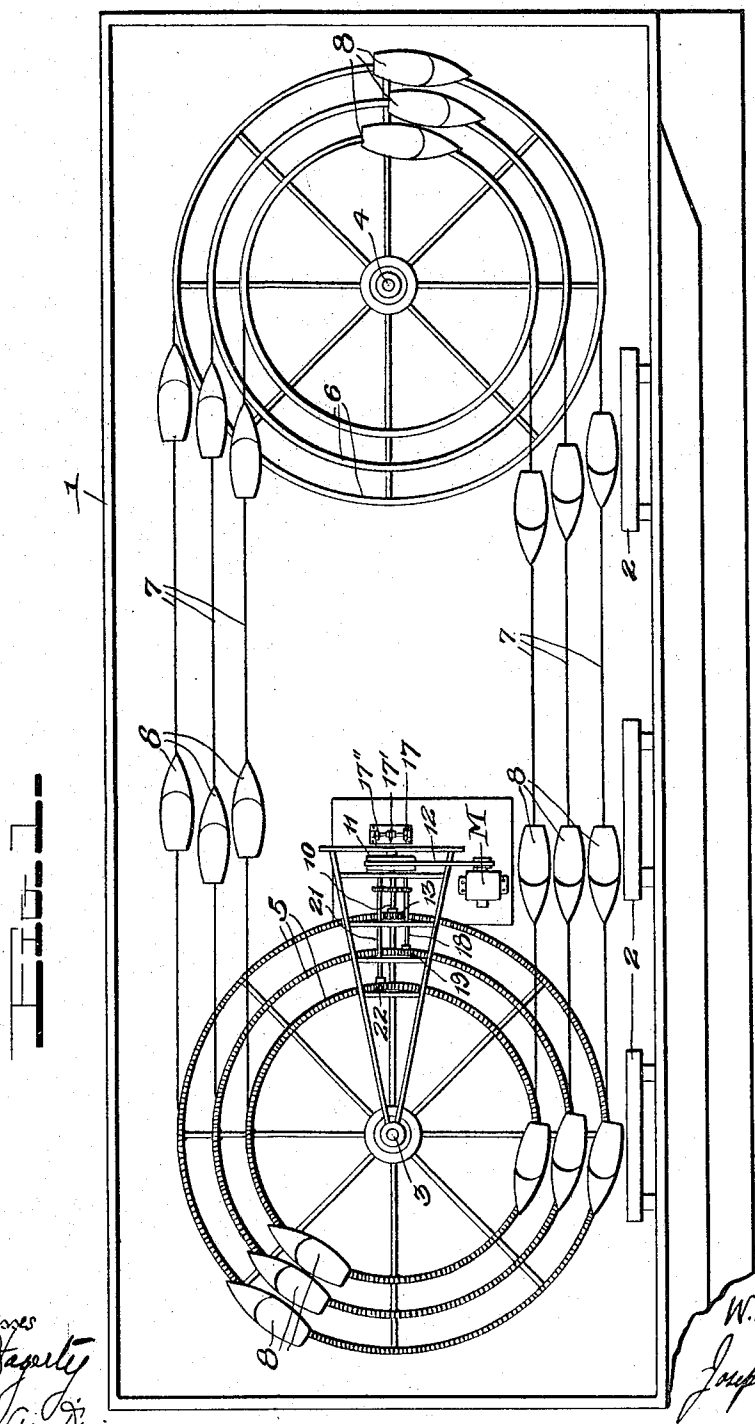


Fig. 1.

Witnesses
Ada F. Hagerty
Grace A. Davis.

Inventor
W. E. Miller
Joseph A. Miller
Attorney

W. E. MILLER.

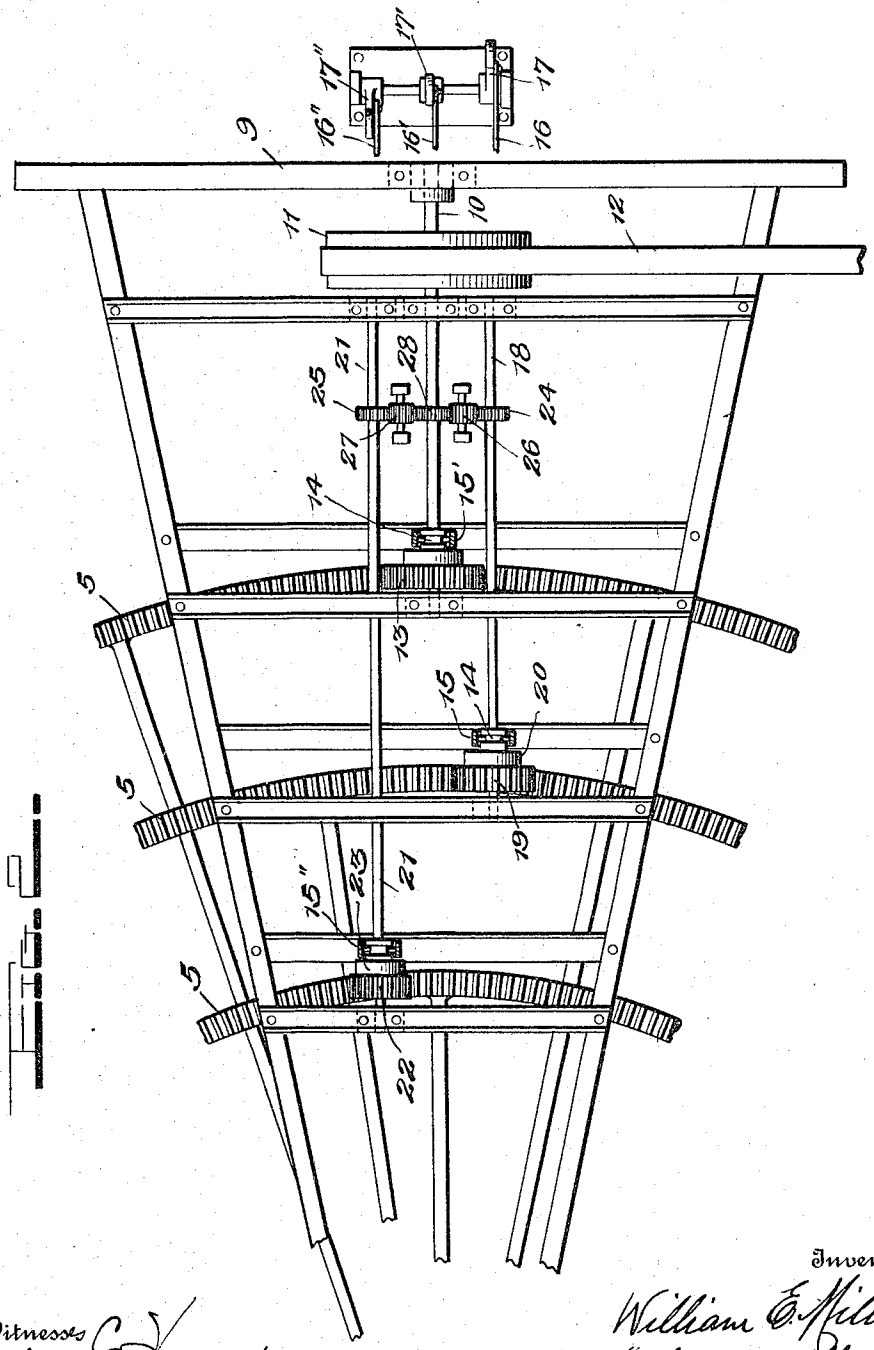
AMUSEMENT DEVICE.

APPLICATION FILED JAN. 12, 1916.

1,195,707.

Patented Aug. 22, 1916.

3 SHEETS—SHEET 2.



Witnesses
Ada E. Hagerty.
Grace W. Davis.

By

Inventor
William E. Miller
by Joseph A. Miller
Attorney

W. E. MILLER.

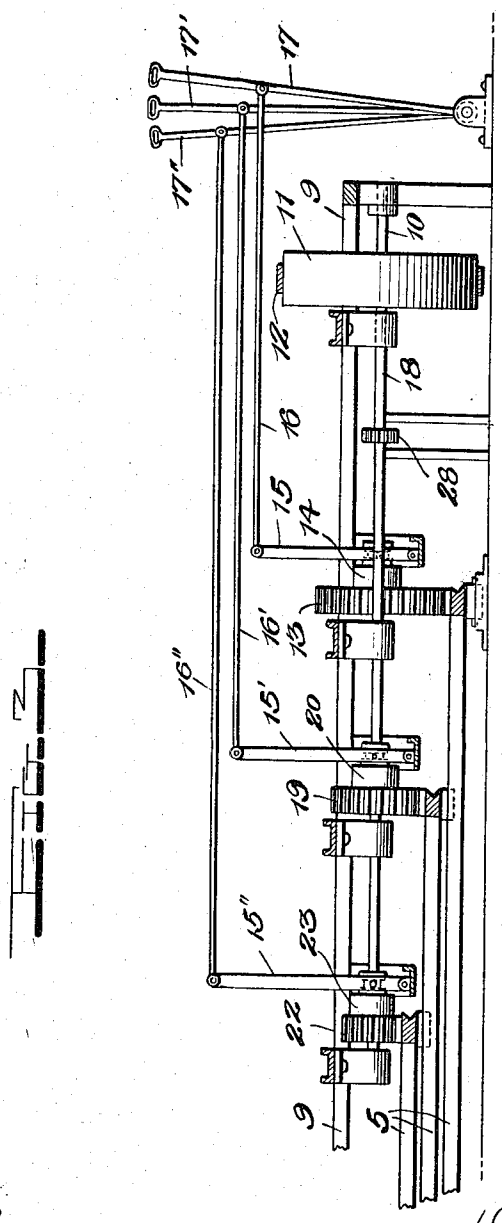
AMUSEMENT DEVICE.

APPLICATION FILED JAN. 12, 1916.

1,195,707.

Patented Aug. 22, 1916.

3 SHEETS—SHEET 3.



Witnesses
Ada L. Hegerly
Grace A. Davis.

Inventor
William E. Miller
By Joseph A. Miller
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM E. MILLER, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF ONE-HALF TO WILLIAM H. KENDALL, OF PROVIDENCE, RHODE ISLAND.

AMUSEMENT DEVICE.

1,195,707. Specification of Letters Patent. Patented Aug. 22, 1916.

Application filed January 12, 1916. Serial No. 71,651.

To all whom it may concern:

Be it known that I, WILLIAM E. MILLER, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Amusement Devices, of which the following is a specification.

This invention relates to certain new and useful improvements in amusement devices and pertains more particularly to devices of this kind in which there are boats which are caused to move through water, the boats being adapted to be given varying speeds so as to increase the amusement afforded the occupants by simulating a race between different boats.

The invention further aims to provide a device of this character in which the control of speed of the boats can be easily effected, and further to provide improved means for driving the several chains of boats.

In the drawings, Figure 1 is a top plan view of the invention. Fig. 2 is an enlarged detail fragmentary top plan view. Fig. 3 is a side elevation of Fig. 2, partly in section.

In proceeding in accordance with the present invention, a tank 1 is employed which is adapted to be filled with water, and which has landings 2 upon which the passengers stand in loading and unloading the boats.

Adjacent each end of the tank are vertical shafts 3 and 4 upon which are rotatably mounted for independent movements a series of concentric wheels 5 and 6, the former being formed with gear teeth. It will be understood that instead of there being three wheels on each shaft a greater or less number may be employed, since the number does not form a part of the invention. Cables or wire ropes 7 pass around the respective wheels 5 and 6 and have each a series of shallow boats 8 secured thereto so that by and upon movement of the cables, the boats will be moved or propelled through the water.

A frame structure 9 has a shaft 10 journaled thereon, the shaft being driven by means of a pulley 11 and a belt 12, the belt leading to any suitable driving device, such as an engine or motor, shown in Fig. 1 at M. The shaft 10 has a gear wheel 13 mounted thereon which gear wheel is adapted to mesh with the gear teeth of the largest wheel 5, a clutch 14 being provided to throw the gear 13 into and out of driving position. The clutch 14 is operated by means of a vertical pivoted lever 15 connected by a link 16 with a vertical pivoted hand operated lever 17. A second shaft 18 is journaled on the frame 9 and has a similar gear and clutch connection as that above described with the intermediate wheel 5, the gear being designated 19, the clutch 20, and the levers and link 15′, 16′ and 17′. A third shaft 21 is also journaled on the frame 9 and has a gear 22 which meshes with the smallest wheel 5, a clutch 23 operated by levers and link 15″, 16″ and 17″, being provided similar to that provided in connection with the gear 13.

The shafts 18 and 21 have gears 24 and 25 respectively, which, through intermediate gearing generally designated 26 and 27 and driven by a gear 28 on the main shaft 10, effect rotation of the two shafts 18 and 21 simultaneously with shaft 10 and in the same direction as the latter.

In operation, the motor is started driving the cables 7, and therewith the boats 8. The operator of the device is stationed in a position so as to easily operate the several hand control levers 17, 17′ and 17″ and may at will throw the clutches into and out of engagement or operative positions so as to thus vary the speed of the boats, with the effect that one chain of boats will travel faster than the others, thus simulating a race and adding to the amusement of the occupants of the boats. Obviously the operator may throw the clutches into and out of engagement as often as desired and can thus control the speed of each chain of boats independently of the others.

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

1. In combination with a water containing tank, a series of wheels at each end of the tank, endless cables passing around the wheels, boats affixed to the cables, a drive wheel, one of said series of said wheels having gear teeth, a drive shaft having a gear meshed with the gear teeth of one of the wheels, other shafts having gears meshed with the teeth of the respective other wheels, means to drive said other shafts from the

drive shaft, clutches for each shaft, and manually controlled means for operating the clutches.

2. In combination with a water containing tank, a series of wheels at each end of the tank, endless cables carrying boats passed around the wheels, one of the series of wheels having gear teeth, a shaft for each wheel of said last named series having a gear meshing with the teeth of said wheels, a clutch for each shaft, hand control levers for each clutch, and means to drive the shafts in unison.

3. In combination with a water containing tank, a series of wheels at each end of the tank, the wheels of one series having gear teeth, a shaft having a gear meshed with the teeth of one wheel, other shafts having gears meshed with the respective other wheels of those having gear teeth, means to drive the first shaft, and means to drive the other shafts from the first shaft.

4. In an amusement device, two series of wheels, endless cables passing around the wheels, conveyances secured to the cables, a series of shafts one for each wheel of one of the two series of wheels, means for driving said wheels from said respective shafts, means to drive one of the shafts, means between said last named shaft and the other shafts for driving the latter from the former, and means for each shaft for rendering same operative and inoperative at will.

5. In an amusement device, two series of wheels, endless cables passing around the wheels, conveyances secured to the cables, each wheel of one of the series of wheels having gear teeth, a shaft for each of said wheels having a gear meshed with the teeth thereof, means to drive the shafts in unison, and a series of independent means one for each shaft for rendering the latter operative and inoperative at will.

6. In an amusement device, a tank, two sets of wheels the wheels of each set being of varying diameters and located at the respective ends of the tank, endless cables engaging over the wheels, boats connected to the cables, a series of driving means for one series of wheels, means to operate all of the driving means in unison whereby the latter rotate the wheels at varying speeds owing to the varying wheel diameter, and means for independently controlling the drive of each driving means.

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

WILLIAM E. MILLER.

Witnesses:
ADA E. HAGERTY,
J. A. MILLER.