No. 760,469. PATENTED MAY 24, 1904.

A. F. MUELLER.

AMUSEMENT APPARATUS.

APPLICATION FILED DEC. 29, 1903.

NO MODEL.

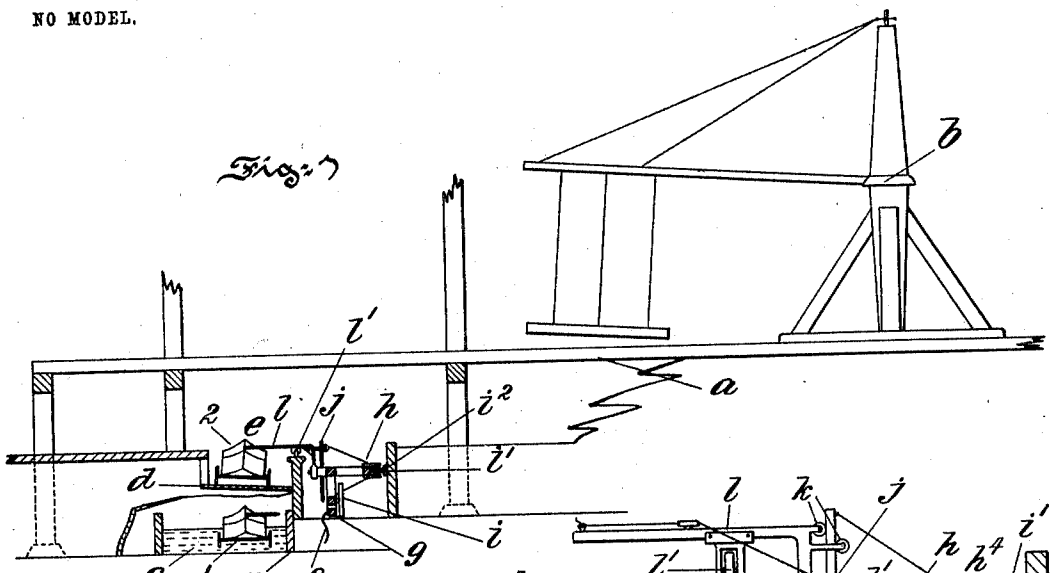


Fig. 1

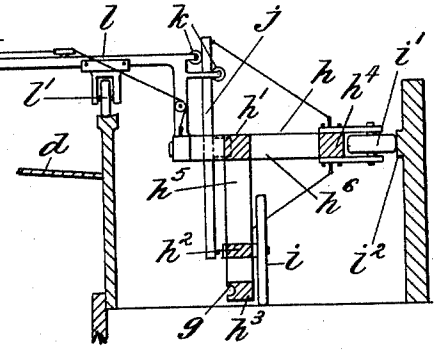


Fig. 3

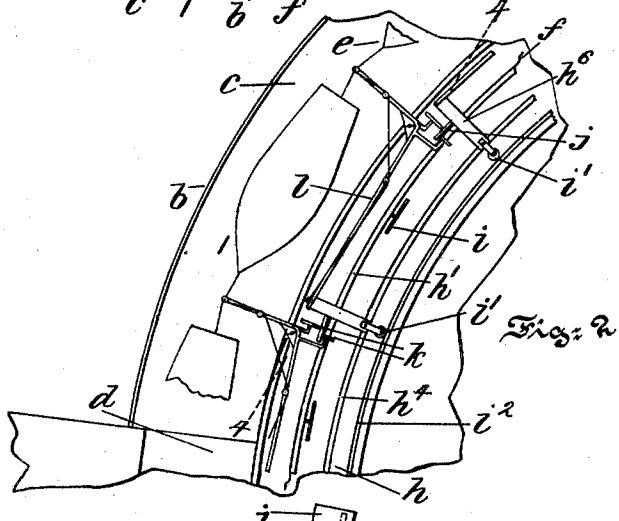


Fig. 2

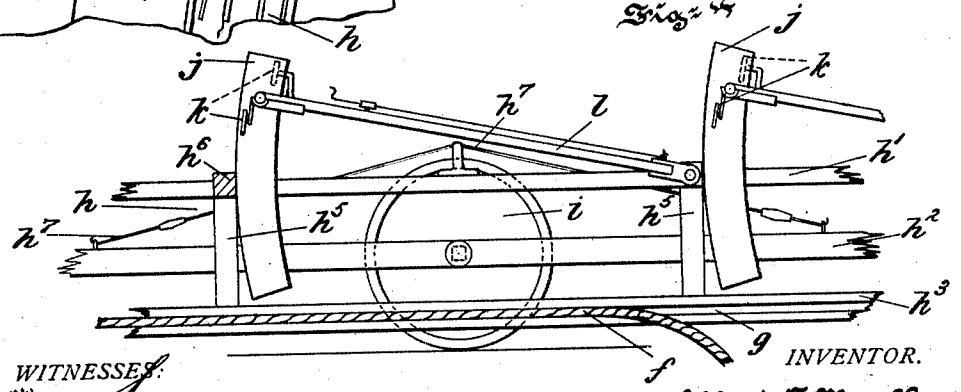


Fig. 4

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No. 760,469. Patented May 24, 1904.

# UNITED STATES PATENT OFFICE.

ALFRED F. MUELLER, OF PHILADELPHIA, PENNSYLVANIA.

## AMUSEMENT APPARATUS.

SPECIFICATION forming part of Letters Patent No. 760,469, dated May 24, 1904.

Application filed December 29, 1903. Serial No. 186,952. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED F. MUELLER, a subject of the Emperor of Germany, residing at Philadelphia, in the county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Amusement Apparatus, of which the following is a description, reference being made to the accompanying drawings, forming part thereof.

It is one object of the present invention to provide apparatus for affording pleasure and amusement wherein a series of conveyances or boats are caused to travel in a circular course consisting of water and an inclined or undulating trackway.

Another object of the invention is to so arrange the structure of the apparatus that the same may be made to operate over a large area and to that end be light, strong, durable, and comparatively inexpensive to manufacture.

Other objects will hereinafter appear.

The invention consists of the improvements hereinafter set forth and claimed.

The nature, characteristic features, and scope of the invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is an elevational view, principally in section, of the amusement apparatus embodying the invention. Fig. 2 is a fragmentary view of the same. Fig. 3 is a detail view of a portion of the apparatus shown in Fig. 1, and Fig. 4 is a view taken approximately on the line 4 4 of Fig. 2.

Referring to the drawings, and with reference more especially to Fig. 1, *a* is a structure of any suitable material upon which may or may not be operated a merry-go-round or carousel *b*. Situated beneath the same is a circular course *b*, of which a portion is water *c*, and the remaining portion is an undulating or inclined trackway *d*, upon which a plurality of conveyances, as boats *e*, are caused to travel.

In use the carousel and the circular course, together with its conveyances, are usually associated together, since the motive power will suffice for both and by reason of the fact that a choice of amusements may be derived from visiting the same amusement establishment.

With reference now to the circular course beneath the merry-go-round *h* may be said to be a circular framework of which its cross-section is of the nature of a right angle. It consists of radial arms $h^6$, which carry circumferential strips $h'$, $h^2$, $h^3$, and $h^4$, and upright members $h^5$. This structure or frame is strengthened by means of rods or stays $h^7$. Such an arrangement is light, strong, and durable and is convenient and necessary where such an apparatus is intended to operate over a large area.

*i* represents traveling wheels journaled to the strip $h^3$ and travel upon the floor of the apparatus. $i'$ represents also traveling wheels and are journaled to the end of the radial arms $h^6$ and bear against the rail $i^2$. There may be located in the strip $h^3$ a groove *g*, Fig. 7, adapted to receive an operating-cable *f*, which may be driven from any desired source—as, for instance, electrical mechanism. Pivoted to the radial arms $h^6$ are angle-pieces *l*, which are provided with rollers *k*, adapted to track upon the roller-support *j*. The roller-support *j* is secured to and made part of the circular framework *h*. The angle-pieces are also provided with traveling wheels $l'$. The conveyances or boats *e* are secured to the angle-pieces by means of cords which pass over suitable pulleys upon the angle-pieces and are secured at or near the pivotal point of said pieces, Fig. 3.

The operation of the above-described apparatus may be said to be as follows: Assume the apparatus to be at rest and that one of the boats is in the position designated 1, Figs. 1 and 2. Power is applied to the part $h^3$, and the structure or framework *h* is caused to rotate. The boat thereupon will be caused to mount the incline *d* and assume the position designated 2, Fig. 1. In doing this the angle-arms to which it is directly connected respond to the upward movement and facilitated by the pulley connections equalize the plane of the boat in such a manner that the same is caused to keep a substantially horizontal position, thus adding materially to the comfort of the passenger of the boat. The roller-sup-

ports take up the strain arising from this movement, and the cord-and-pulley connections obviate all sudden jerks or the like and permit a steady and straight pull.

It will be obvious to those skilled in the art to which the invention relates that modifications may be made in details without departing from the spirit and scope of the same. Hence I do not limit myself to the precise construction and arrangement of parts hereinbefore described, and illustrated in accompanying drawings; but,

Having described the nature and objects of the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An amusement apparatus of the class described comprising a circular course consisting of water and inclined ways, a framework comprising a series of radial arms carrying circumferential strips, roller-supports secured to the strips, angle-pieces pivoted to the arms, rollers journaled to the angle-pieces and adapted to track upon the supports, a plurality of conveyances connected with the angle-pieces, traveling wheels for the framework and driving means applied to said framework for imparting motion to the conveyances, substantially as described.

2. An amusement apparatus of the class recited comprising a circular course consisting of water and inclined ways, a framework consisting of a series of radial arms carrying circumferential strips, roller-supports upon the strips, angle-pieces pivoted to the arms, rollers journaled to the angle-pieces and adapted to track upon the supports, traveling wheels for the framework, a plurality of conveyances, means between the conveyances and the angle-pieces for equalizing the horizontal plane of the conveyances when mounting the inclined ways, and an operating-cable for imparting motion to the apparatus, substantially as described.

3. An amusement apparatus of the class recited comprising a circular course consisting of water and inclined ways, a series of radial arms, circumferential strips carried by said arms, a groove located in one of said strips, roller-supports upon the strips, angle-pieces pivoted to the arms, rollers and pulleys on the angle-pieces, wheels journaled to the strips, arms and angle-pieces, a plurality of conveyances, cords connected with the conveyances and passing over the pulleys to a fixed point on the angle-pieces and an operating-cable adapted to said groove, substantially as described.

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

ALFRED F. MUELLER.

Witnesses:
FRANCIS X. CONNOLLY,
ADA W. SUMERFIELD.