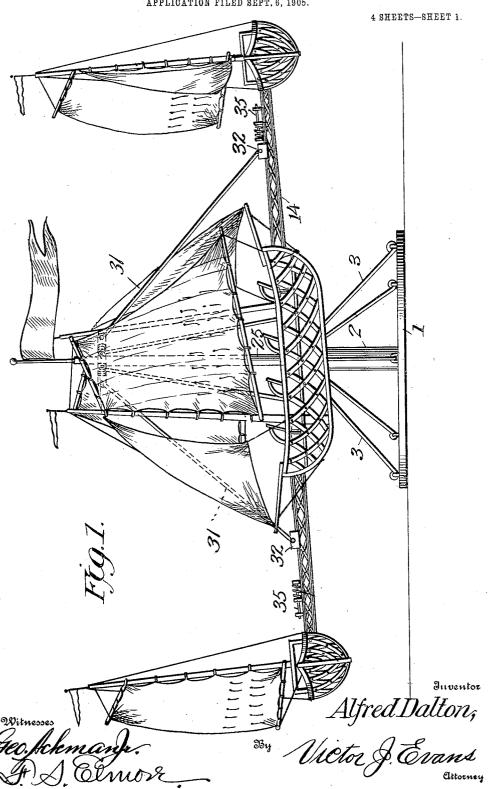
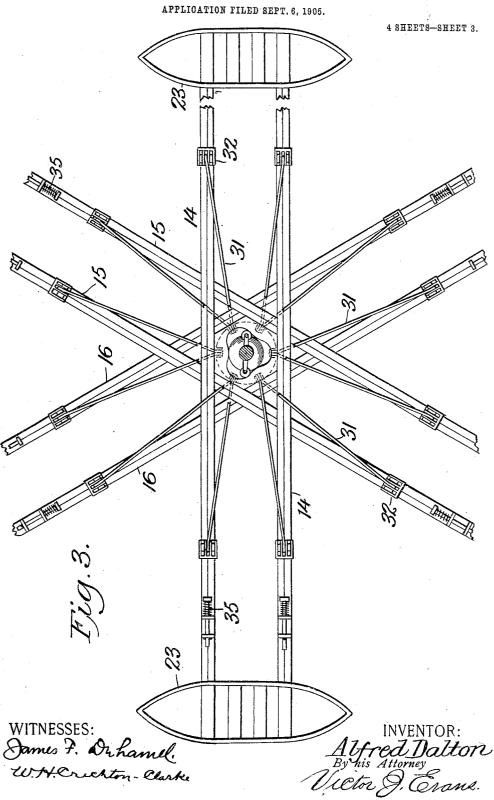
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AMUSEMENT DEVICE.
APPLICATION FILED SEPT. 6, 1905.



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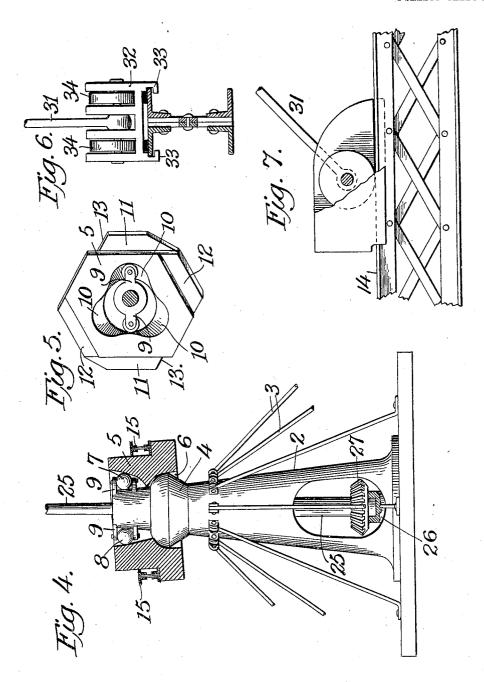
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4 SHEETS-SHEET 4.



WITNESSES: Samus ? Duhamil W.H. Crichton - Clarke

INVENTOR: Alfred Dalton, By his Attorney Ucetor D. Evans.

UNITED STATES PATENT OFFICE.

ALFRED DALTON, OF BROOKLYN, NEW YORK.

AMUSEMENT DEVICE.

No. 813,953.

Specification of Letters Patent.

Patented Feb. 27, 1906.

Application filed September 6, 1905. Serial No. 277,202.

To all whom it may concern:

Be it known that I, ALFRED DALTON, a subject of the King of England, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Amusement Devices, of which the following is a specification.

This invention relates to amusement devices such as are commonly known as 10 "merry-go-rounds" or "razzle-dazzles."

It is well known that devices of the character specified consist usually of a revolving framework on which is mounted a plurality of animals, sleds, boats, or similar devices to 15 receive persons who are seeking amusement. In addition to the revolving motion of the framework it is desirable also to secure an upand-down motion of the animals, boats, or the like. In merry-go-rounds this up-and-20 down motion has been secured in various ways, such as by the use of eccentrics, cranks. and the like; but the objection to such forms of devices is that they are too expensive and are subjected to great strain and wear, so that

their efficiency is quickly impaired.
In the so-called "razzle-dazzles," which consist usually of a ring suspended from a center support by means of ropes, rods, or cables, it is customary to employ a number of 3° men who walk around the device and impart to the ring which contains the pleasureseekers a combined rotary and up-and-down movement by means of drag-ropes. The objection of this form of device is that it is ex-35 pensive on account of the excessive amount

of manual labor involved.

The object of the present invention is to improve the construction of amusement devices of the character indicated in such man-4° ner as to avoid the use of intricate machinery and to dispense with the employment of men for imparting a gyratory or combined rotary and up-and down movement to the platform of the amusement device.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts in the details of construction hereinafter described and $5\,^{\circ}\,$ claimed as a practical embodiment thereof.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of an amusement device constructed in accordance with the invention. Fig. 2 is a similar view, partly in section, with the 55 boats not shown. Fig. 3 is a plan view of the device. Fig. 4 is a side elevation of the supporting member. Fig. 5 is a plan view of the construction illustrated in Fig. 4. Fig. 6 is an end view of one of the sliding brackets. 60 Fig. 7 is a side elevation of one of the sliding brackets, partly broken away.

Like reference-numerals indicate corresponding parts in the different figures of the drawings.

The reference-numeral 1 indicates a suitable base on which is mounted a bearing member 2. The bearing member 2 is braced in any suitable manner, such as by means of rods 3. Formed upon the supporting mem- 70 ber 2, above the brace-rods 3, is a collar 4, having a rounded upper end. Surrounding the supporting member 2 and resting upon the collar 4 is a hub 5, which is formed with a round opening 6 in its lower portion to re- 75 ceive the collar 4 and permit the hub to have a wabbling or gyratory movement thereon.

The means for imparting a wabbling or gyratory movement to the hub 5 as it rotates upon the supporting member 2 preferably 80 comprises a pair of rollers 7 and 8, which are journaled between suitable lugs 9 upon the supporting member 2. The hub 5 above the collar 4 is formed with a flared or irregular bore having a plurality of concavities, such 85 as 10. As the hub 5 is rotated upon the supporting member in the manner hereinafter described the stationary rollers 7 and 8 move into and out of the concavities 10, so as to impart a wabbling motion to the hub 5, as indi- 9° cated in Fig. 4.

The hub 5, as indicated in Fig. 5, is formed exteriorly with a plurality of pairs of parallel shoulders, such as 11 11, 12 12, and 13 13, which are arranged at different horizontal 95 levels, although the two parallel shoulders of each pair are in the same horizontal plane.

Secured to the shoulders of the hub 5 in any suitable manner are parallel pairs of supporting-beams 14 14, 15 15, and 16 16, which 100 2 813,953

cross each other at suitable angles, as shown clearly in Fig. 3. By forming the hub 5 with pairs of parallel shoulders arranged at different levels the supporting-beams can be compactly interlaced, as shown in Fig. 3, so as to form a strong rigid structure. As indicated in Fig. 2, the ends of the lower parallel beams 16 are bent upward, and the ends of the upper parallel beams 14 are bent downward, so 10 that the ends of all the beams terminate in the same horizontal plane. The structure formed by the supporting-beams 14, 15, and 16, which is to be given a combined rotary and wabbling movement in the manner here-15 inafter described, is provided with any suitable receptacles for amusement seekerssuch, for example, as boats 23, having sails, as indicated in Fig. 1. In some cases it may be possible to operate the structure through 20 the action of the wind; but it is generally preferred to operate the same by the mechanical means hereinafter described. It will be understood that the invention contemplates the use of other devices than boats whenever 25 desirable.

The means by which the structure carrying the boats or other devices is rotated preferably comprises a shaft 25, which extends upward through the supporting member 2. At 3° its lower end the shaft 25 is stepped in a suitable socket-piece 26 and is provided with a bevel-gear 27, adapted to be intermeshed with any suitable bevel-gear 28, mounted upon a power-shaft operated from any suitable 35 source of power (not shown) and adapted to cause the rotation of the shaft 25. It will be understood that the gear-wheels 26 and 27 may be moved out of engagement with each other in any well-known and suitable man-40 ner when it is desired that the structure shall be rotated by the force of the wind. At its upper end the shaft 25 is provided with suitable lugs or attaching members 30, to which are secured rods 31, attached at their lower 45 ends to sliding members 32, mounted upon the supporting-beams 14, 15, and 16, as shown in Figs. 3, 6, and 7. The sliding members 32 preferably are provided with flanges 33, which hold them in position upon the 50 supporting-beams, and antifriction-rolls 34, which cause them to slide easily upon the beams. Mounted upon each of the supporting-beams in advance of the sliding member 32 is a spring buffing member 35, which may 55 be of any suitable form and construction adapted to limit the movement of the adjacent sliding members.

Constructed as hereinbefore described the improved amusement device is operated in 60 the following manner. The shaft 25 is rotated by power applied to the gear-wheel 27. Through the medium of the draw-rods 31 the frame composed of the supporting-beams 14, 15, and 16. As the frame is rotated the roll- 65 ers 7 and 8, in conjunction with the cavities 10, cause the same to gyrate or rise and fall during the rotation. During the combined rotary and up - and - down movement of the frame the sliding members 32 move upon the 70 supporting-beams. As each sliding member reaches the limit of its outward movement it strikes against the buffing device 35 and serves to limit the tilting of the frame.

The improved device of this invention is 75 strong, simple, durable, and inexpensive in construction, as well as thoroughly efficient

in operation.

Changes in the precise embodiment of invention illustrated and described may be 80 made within the scope of the following claims without departing from the spirit of the invention or sacrificing any of its advantages.

Having thus described the invention, what

is claimed as new is-

1. An amusement device having a support, a hub mounted for a rotary movement on said support, said hub being formed with a plurality of pairs of shoulders arranged in different planes, and a plurality of pairs of sup- 90 porting-beams resting against said shoulders and crossing each other at suitable angles.

2. An amusement device having a support, a hub mounted for a rotary movement on said support, said hub being formed with a plu- 95 rality of pairs of shoulders arranged in different planes, and a plurality of pairs of supporting-beams resting against said shoulders and crossing each other at suitable angles, the ends of all of said beams terminating in 100

the same plane.

3. An amusement device comprising a supporting member, a hub mounted for a rotary movement on said supporting member said hub having an irregular bore in the up- 105 per portion thereof, a plurality of rollers journaled upon the supporting member and adapted to engage the walls of the irregular bore for imparting a wabbling motion to the hub, a framework connected with the hub, 110 and means for rotating the framework.

4. An amusement device comprising a supporting member, a hub mounted upon the supporting member and having an irregular bore in the upper portion thereof, a plu- 115 rality of rollers journaled upon the hub and being adapted to contact with the walls of the irregular bore for imparting a wabbling motion to the hub, a plurality of pairs of shoulders formed upon the hub in different 120 planes, a plurality of pairs of supportingbeams resting against the shoulders and having their outer ends arranged in the same plane, a plurality of boats connected with the supporting - beams, a vertical shaft ex- 125 rotation of the shaft 25 is transmitted to the | tending through the supporting member,

means for rotating the vertical shaft, a plurality of draw-rods connected with the vertical shaft, a plurality of sliding members upon the supporting-beam, said sliding members being connected with the draw-rods, and a plurality of buffing devices upon the supporting-beams, said buffing devices being adapted to cooperate with the sliding member to

limit the tilting or wabbling movement of the frame formed by the supporting-beams. 10 In testimony whereof I affix my signature in presence of two witnesses.

ALFRED DALTON.

Witnesses:

GEO. J. WALSH. H. G. HOSE.