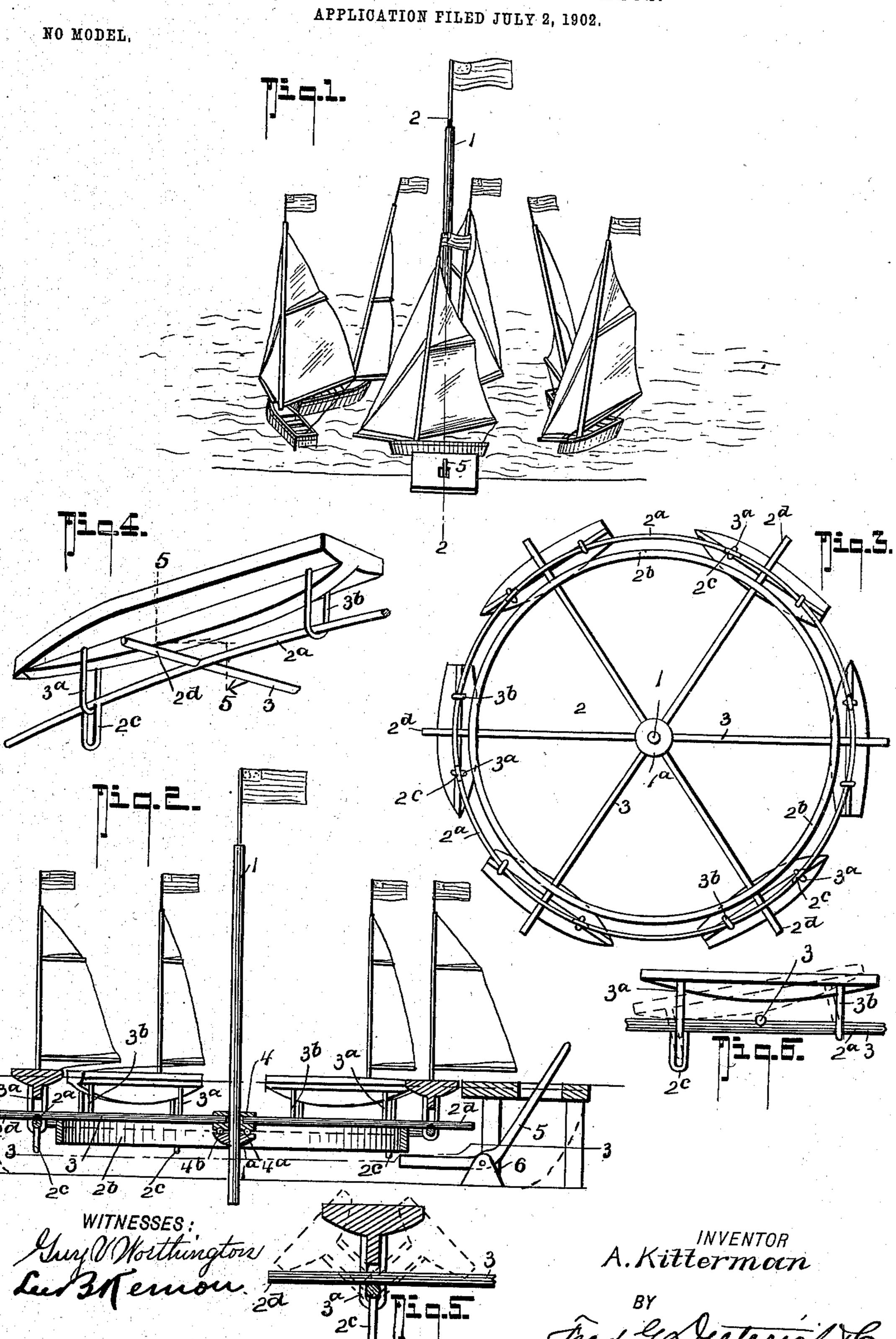
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ROUNDABOUT SAILING APPARATUS.



United States Patent Office.

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SPECIFICATION forming part of Letters Patent No. 723,162, dated March 17, 1903.

Application filed July 2, 1902. Serial No. 114,113. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER KITTER-MAN, residing at Portland, in the county of Multnomah and State of Oregon, have invented a new and Improved Roundabout Sailing Apparatus, of which the following is a

specification.

This invention relates to improvements in the type of merry-go-rounds or roundabouts in the nature of boats or other floatable receivers adapted to sail around a common center or axial point; and it comprehends, generically, a novel correlative arrangement of a circle-cycle comprising a center post, a submersible frame connected with the post and rotatable in a horizontal plane around said post, and a series of sail-boats independently secured to the submersible frame in such manner that the apparatus in the practical construction will have the appearance of a series of independent boats sailing in a circular orbit about a center post.

In its more complete make-up my invention includes a novel means for attaching the boats to the circle-frame whereby to permit each boat to rock freely laterally to a desired degree and without danger of capsizing; and in its more subordinate nature the invention consists in certain novel details of construction and peculiar combination of parts, all of which will hereinafter be fully explained, and particularly pointed out in the appended

claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view illustrating the practical arrangement of my sail-boat apparatus. Fig. 2 is a transverse section of the same, taken practically on the line 22 of Fig. 1. Fig. 3 is a horizontal section taken on the line 33 of Fig. 2, the boats being diagrammatically illustrated. Fig. 4 is a perspective view illustrating the manner of attaching the boats to the circle-frame. Fig. 5 is a cross-section on the line 5 5 of Fig. 4, the dotted lines indicating the limit of the lateral tilting of the same. Fig. 6 is a detail view illus-

trating the brake device controlling the move-

ment of the apparatus.

In its practical construction my roundso about or pleasure apparatus comprises a center post 1, set at any desired point in a lake, on the sea-shore, in a river, or other body of

water, and which is firmly anchored in any suitable manner, and to present a pleasing appearance it is decorated with flags, bunt- 55

ing, or other similar material.

2 designates what I term the "circle-cycle" or "horizontal" frame, and which consists of an outer circular frame 2a, preferably formed of a stout steel rod, and 2^b an inner circu- 60 lar frame, which, for reasons hereinafter explained, is disposed in a plane below the outer frame, as clearly shown in Fig. 2. The two frames 2^a 2^b are rigidly secured to a series of radially-projecting arms 3, also formed of 65 stout steel rods, which join at their inner ends with the cuff or sleeve 4, mounted upon the post 1 to turn freely thereon, and to reduce friction the said cuff may be provided with a ball-race 4^a, carrying friction-balls 4^b 70 for riding upon the stepped bearing 1a of the post, as shown.

At a suitable point to one side of the horizontal frame a brake-lever 5 is mounted in a bracket 6, and the shoe or contact end of said 75 lever is arranged to engage with the inner circular frame 2^b, as shown, it being understood that the said brake mechanism is intended to be applied when it is desired to bring the roundabout to a standstill and to hold the 80 same to its standing position during the loading or unloading of the boats with pleasure-

seekers.

By placing the inner frame in a plane below the outer frame the brake mechanism can 85 be readily applied and the several boats be free to move on the outer frame 2 in a manner which I shall now describe.

By referring now particularly to Figs. 3, 4, 5, and 6 it will be noticed that the keel or 90 bottom of the boat has a pendent metal loop 3° at the bow and a similar pendent loop 3° at the stern, and these two loops straddle the outer circular frame-bar 2°, and to hold the said boat from longitudinal movement upon 95 the said bar an eye or bail piece 2° is formed on the bar for coöperating with either one of the pendent rod-engaging members of the boat, as shown.

At suitable points the frame 2^a has trans- 100 versely-projecting members 2^d, which form laterally-projecting stop portions, with which the side of the boat is adapted to engage when tilted laterally, as clearly shown in Fig. 5,

and thereby hold the boat from capsizing, and thus make the use of my sailing apparatus ab-

solutely safe.

Each boat has a suitable rigged sail, and 5 each boat, as will be noticed from the drawings, is independently attached to the circlecycle. By making the joint for connecting the boat with the circle-cycle as elongated bails, as shown and described, it is manifest 10 that the boat has an up-and-down motion from the bow to the stern, as well as a side motion, and by reason of the lateral projecting stop members before referred to, forming a part of the circle-frame, the boats strike 15 the said members when listed over. By reason of connecting the boats in the manner shown and described the several boats constituting the entire series assume all positions before the wind, in the wind, and tacking, 20 and, in fact, they will be sailing at all points of the compass. This gives the occupants the benefit of a genuine sail and without the least danger, as the said boats cannot upset.

While I have described the circle-frame as being preferably formed of stout steel rod it is manifest that the same may be built of iron or wood. For pleasure-grounds, excursion-places, &c., where there is no body of water I prefer to provide an artificial lake having a cemented bottom, as indicated in dotted lines in Fig. 2. The boats in practice can be rigged with any style of sail, and said boats can be made of any size desired. It will be noticed that by arranging the boats in the manner shown and described there will

be no one required to guide them.

I am aware that roundabouts including boats secured to a frame rotatable about a center post and horse-power or other special 40 means for imparting motion to the circle-frame and to the boats have heretofore been provided; but my invention differentiates from such style of roundabouts in that instead of the frame imparting motion to the 45 boats the boats are driven by the wind, and in their movement they carry the frame around the center post. Thus as a number of the boats are under a full head or wind force the natural applied force of such boats will 50 be sufficient to overcome the resistance on the other side traveling against the wind, it

being understood that the resistance of the boats against the wind can also be materially decreased by properly adjusting the sails to the tacking position.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

1. An apparatus for the purposes described, comprising a center post, a circle-cycle frame 60 connected with and rotatable about the post, said frame including an outer member and an inner member, the latter being in a plane below the outer member, radial arms connecting the two frame members with the post, 65 a brake device for engaging the inner frame member, a series of sail-boats independently secured to the outer frame, and laterally swingable thereon, and means for limiting the lateral movement of the boats, as set forth. 70

2. In a pleasure apparatus as described, the combination with the center post, and the rotatable frame coöperating therewith, said frame including an outer circular member; of a sail-boat having a pendent loop at the 75 bow and a pendent loop at the stern for engaging with the said outer frame, means on the said outer frame for limiting the longitudinal movement of the boat, and a transversely-projecting stop fixedly secured to the 80 said member, adapted to be engaged by the sides of the boat when the same lists in either direction to limit the lateral motion of

the boat, as specified.

3. In a pleasure apparatus of the character described, the combination with a center post, adapted to be fixedly supported in a lake or other body of water, a circle-cycle frame mounted on the said post to rotate in a horizontal plane below the water-surface, 90 a series of boats independently connected to the said frame, and having a lengthwise and transverse rocking motion relatively to the said frame, and means for limiting the transverse rocking motion of the boats, forming a 95 fixedly-held part of the rotatable frame, all being arranged substantially as shown and for the purposes described.

ALEXANDER KITTERMAN.

Witnesses:

H. A. SMART, S. J. HUBBARD.