

1,087,722.

S. W. BRUNDAGE.

CAROUSEL.

APPLICATION FILED JUNE 13, 1913.

Patented Feb. 17, 1914.

2 SHEETS—SHEET 1.

Fig. 1.

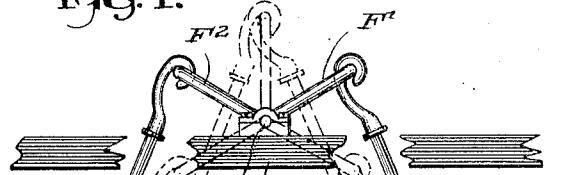


Fig. 2.

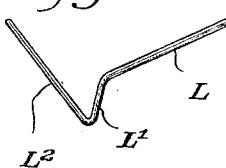
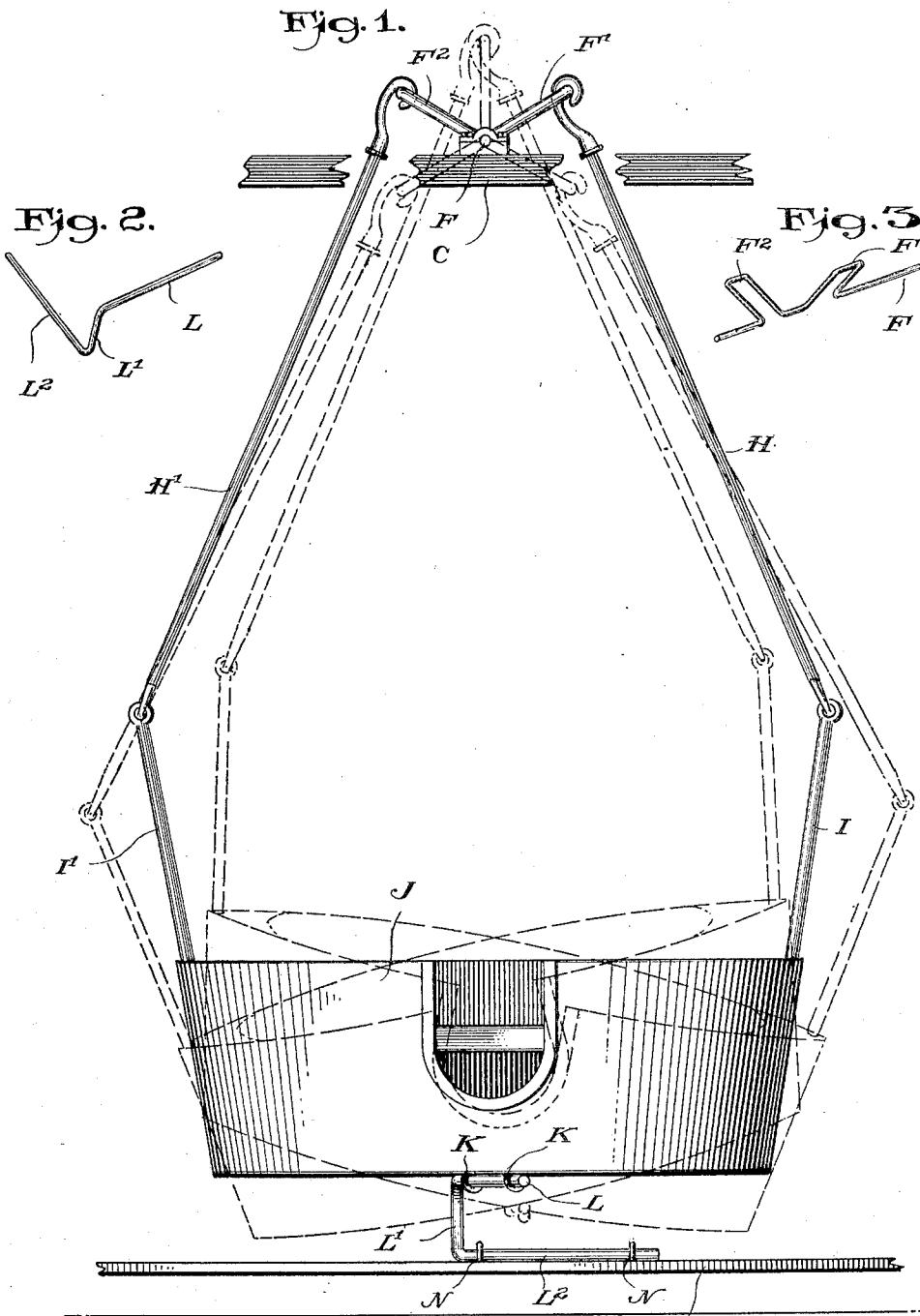


Fig. 3.



WITNESSES

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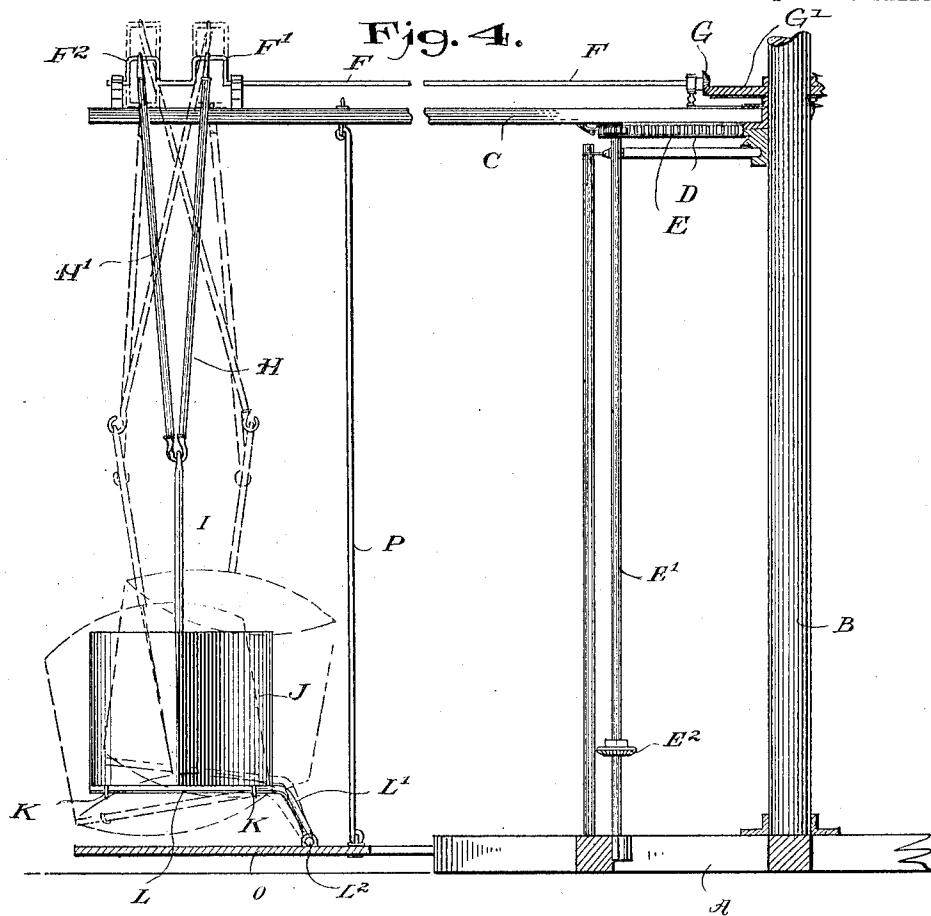
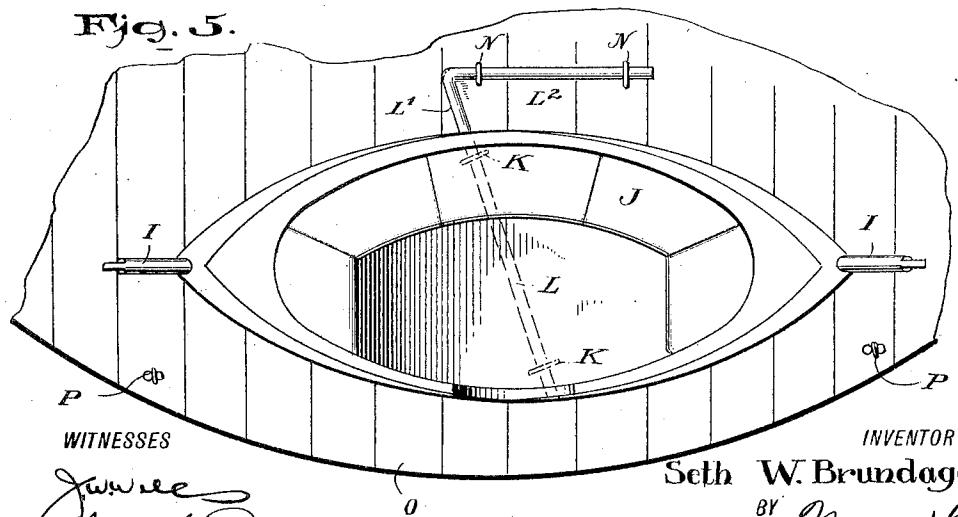


Fig. 5.



**WITNESSES**

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# UNITED STATES PATENT OFFICE.

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## CAROUSEL.

1,087,722.

Specification of Letters Patent.

Patented Feb. 17, 1914.

Application filed June 13, 1913. Serial No. 773,410.

To all whom it may concern:

Be it known that I, SETH W. BRUNDAGE, a citizen of the United States, and a resident of Leavenworth, in the county of 5 Leavenworth and State of Kansas, have invented new and useful Improvements in Carousels, of which the following is a full, clear, and exact description.

The invention relates to amusement apparatus, and its object is to provide new and useful improvements in merry-go-rounds or carousels whereby a pitching and rolling movement is given to a boat or similar vessel while being bodily carried around, 10 so as to enable the occupant of the boat to enjoy a ride similar to that when aboard a pitching or rolling marine vessel on troubled or disturbed waters.

In order to accomplish the desired result 20 the boat is carried bodily around and means are provided for imparting an endwise or pitching motion to the said boat, and means are used for imparting a sidewise rolling motion to the boat.

25 A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

30 Figure 1 is a side elevation of part of a carousel provided with the improvement; Fig. 2 is a reduced perspective view of the diagonal rock arm for imparting a sidewise rolling motion to the boat; Fig. 3 is a perspective view of the crank shaft used for imparting an endwise pitching motion to the boat; Fig. 4 is a cross section of the 35 carousel provided with the improvement; and Fig. 5 is a plan view of the boat, the diagonal rock arm and the carousel platform.

The merry-go-round or carousel is mounted on a suitable base A supporting a mast B on which is mounted to turn the usual overhead structure C provided with a gear 45 wheel D in mesh with a pinion E secured on the upper end of a vertically-disposed shaft E' provided with a gear wheel E<sup>2</sup> connected with a similar gear wheel on the shaft of a motor used for rotating the overhead structure C. On the overhead structure 50 C is journaled a radially disposed crank arm F provided at its inner end with a bevel gear wheel G in mesh with a bevel gear wheel G' fixed on the mast B so that 55 when the overhead structure is rotated a

rotary motion is given to the crank shaft F. The outer end of the crank shaft F is provided with two crank arms F' and F<sup>2</sup> standing at an angle one to the other, as plainly indicated in Fig. 1, and the said crank arms F' and F<sup>2</sup> are pivotally connected by connecting links H and H' with rods I, I' erected in the bow and stern of a boat J, having seats for supporting a number of passengers.

The under side of the boat J is provided with spaced bearings K arranged diagonally on the under side of the boat at the middle thereof, and the said bearings K are engaged by an arm L connected by a downwardly and inwardly-extending arm L' with a rock shaft L<sup>2</sup> journaled in suitable bearings N attached to the platform O of the merry-go-round or carousel, and which platform O is suspended from the overhead 75 structure C by rods P in the usual manner, so that the platform O rotates with the overhead structure C. By reference to the drawings it will be noticed that the axis of the rock shaft L<sup>2</sup> extends parallel to the 80 longitudinal center line of the boat J, while the arm L extends diagonally relative to the boat.

The operation is as follows: When the overhead structure C is rotated and a rotary motion is given to the crank shaft F then the crank arms F', F<sup>2</sup> thereof and the links H, H' impart an endwise pitching motion to the boat J, and in doing so the boat imparts a swinging motion to the rock 90 arm formed of the arms L, L' and the shaft L<sup>2</sup> whereby the boat J is caused to roll sidewise, as will be readily understood by reference to the full and dotted lines in Figs. 1 and 4. Thus from the foregoing it will be 95 seen that by the arrangement described the boat J is bodily carried around and at the same time an endwise pitching motion and a sidewise motion are given to the boat so that the occupants of the boat enjoy a ride similar 100 to that when aboard a pitching or rolling marine vessel on troubled or disturbed waters.

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

1. In a carousel, the combination of a boat, a revoluble structure, means for suspending the boat from the said structure and imparting a pitching motion to the 110

boat, and means connecting the said structure with the boat and imparting a rolling motion to the boat.

2. In a carousel, the combination of a  
5 revoluble platform, a revoluble superstructure, a boat, means for suspending the boat from the said superstructure and imparting a pitching motion to the boat, and means connecting the said platform with the said  
10 boat and imparting a rolling motion to the said boat.

3. In a carousel, the combination of a  
revoluble platform, a revoluble superstructure, a revoluble crank shaft journaled on  
15 the said superstructure and provided with crank arms standing at an angle one to the other, a boat, links connecting the ends of the said boat with the said crank arms, and a rocking arm fulcrumed on the platform and diagonally connected with the said boat.

20 4. In a carousel, the combination of a

revoluble platform, a revoluble superstructure, a revoluble crank shaft journaled on the said superstructure and provided with crank arms standing at an angle one to the other, a boat, links connecting the ends of the said boat with the said crank arms, spaced bearings arranged diagonally on the under side of the boat, bearings on the said platform and arranged parallel to the longitudinal center line of the boat, and a rock arm having a shaft journaled in the said platform bearings, the said rock arm having an angular arm engaging the said boat bearings.

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

SETH WILLIS BRUNDAGE.

Witnesses:

H. O. JONES,  
B. R. PARKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
Washington, D. C."