ATTORNEYS.

S. REDFERN. AQUATIC CAROUSEL.

(Application filed Sept. 21, 1898.) (No Model.) FIG.1. F16.2.

UNITED STATES PATENT OFFICE.

SAMUEL REDFERN, OF NEGAUNEE, MICHIGAN.

AQUATIC CAROUSEL.

SPECIFICATION forming part of Letters Patent No. 648,792, dated May 1, 1900.

Application filed September 21, 1898. Serial No. 691,510. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL REDFERN, of Negaunee, in the county of Marquette and State of Michigan, have invented a new and Improved Aquatic Carousel, of which the following is a full, clear, and exact description.

This invention relates to an apparatus adapted to be floated on a body of water and provided with means by which it is made to turn therein, thus affording a source of amusement and recreation.

This specification is the disclosure of one form of my invention, while the claims define the actual scope of the invention.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective view of the inven20 tion, and Fig. 2 is a vertical section thereof.

The carousel is constructed on a circular

float 3, which has an eyebolt 4 fastened centrally therein, the said eyebolt being joined to a cable-section 5, which has connection by a swivel 6 with a second cable-section 7, and to the cable-section 7 is to be attached an anchor (not shown) by which to hold the float. By means of the swivel 6 the float may be turned around its center without kinking and tangling the cable-sections.

Mounted on the float 3 is an upper deck or superstructure 8, sustained by stanchions and partitions 9 and surmounted by a roof 10. On the float 3 may be constructed various compartments forming observation and refreshment rooms, and the deck 8 may be arranged in the same manner or may be made as a promenade, according to the requirements of the situation.

The carousel is propelled in its rotary movement by sails on the roof 10 and by a propeller-wheel driven by an engine situate on the float 3. The sails 11 on the roof 10 are each held in rectangular frames 12, having trunnions 14, mounted to rock in eyes 15, formed, respectively, on the upper ends of standards 16, rigidly mounted on the roof 10. The standards 16 are arranged in pairs, one pair for each sail, and between each pair of standards a stop 17 is located, such stops being fixed to the roof 10 and serving to hold the

be effectively acted upon by the wind. The action of the sails is illustrated in the drawings. When the wind blows in the direction 55 of the arrow in Fig. 1, the sails at one side of the apparatus are thrown downward and engage with the stops 17, and as these sails turn around with the apparatus they are raised to a horizontal position, so that the wind does 60 not act upon them. The sails thus alternately rise and fall and avoid and receive the motive action of the wind.

The propeller or paddle wheel 18 is mounted at one side of the float on a horizontal 65 shaft 19, held at the upper side of the float and carrying a band-wheel 20, over which a band 21 passes, said band also passing over a pulley 22 on a counter-shaft 23, mounted above the shaft 19. The counter-shaft 23 carries a 70 pulley 24 over which passes a band 25, said band also passing down over a pulley 26, driven from the engine 27 on the top of the float 3. The movement of the engine will be transmitted to the paddle-wheel 18, and the 75 revolution of the paddle-wheel will tend to turn the float 3 around on the swivel 6. The action of the sails 11 will have the same effect. The sails and motor may be used in conjunction with each other or independently, 80 according to the conditions of the weather and to the load on the float. Ordinarily the sails will be sufficient to propel the float; but should greater speed be desired the engine may be employed. The engine, however, is 85 more particularly intended for revolving the float at times when there is no wind.

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

1. In an aquatic carousel, the combination with a float having a deck surmounted by a roof, and an anchor-chain having a swivel connection with the bottom of the float at the center thereof, of standards on the roof of the 95 deck, sail-carrying frames having trunnions mounted in the standards, and stops for limiting the swinging movement of the frames in one direction, substantially as and for the purpose set forth.

pair for each sail, and between each pair of standards a stop 17 is located, such stops being fixed to the roof 10 and serving to hold the sails 11 in vertical position, so that they will the upper ends of said standards, and means

for limiting the swinging movement of said frames in one direction, as and for the purpose set forth.

3. An aquatic carousel, comprising a float, 5 a superstructure mounted on the top of the float to be wholly above water, said superstructure having its lower portion formed into compartments or rooms, and its upper portion into a covered deck, an anchor-chain having to a swivel connection with the bottom of the

float, sail-carrying frames mounted on the top of the deck to swing in but one direction, a propeller-wheel mounted at one side of the lower portion of the superstructure, and means for operating the propeller-wheel, substantially 15 as described.

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Witnesses:

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