

(No Model.)

C. T. WILDE & C. W. HINCHCLIFFE.
ROUNDABOUT.

No. 604,164.

Patented May 17, 1898.

Fig. 1.

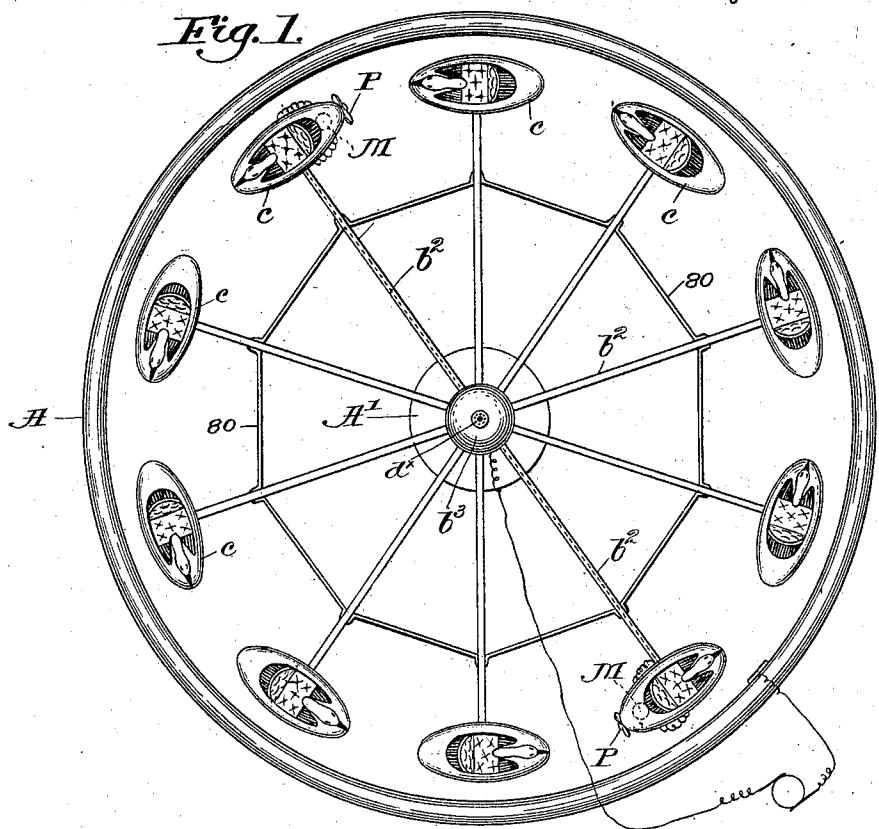


Fig.

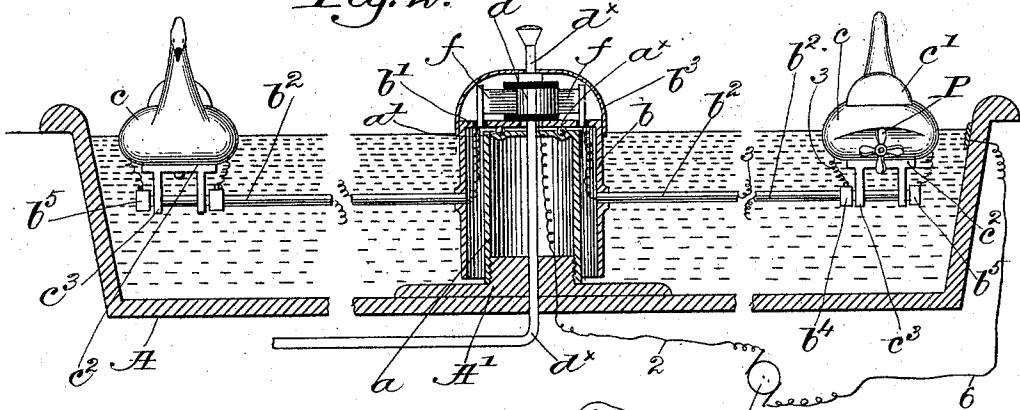


Fig. 3.

Witnesses: P

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3 ff c³ 4 by Dorothy Gregory. attis.

UNITED STATES PATENT OFFICE.

CHARLES T. WILDE AND CHARLES W. HINCHCLIFFE, OF LAWRENCE,
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ROUNABOUT.

SPECIFICATION forming part of Letters Patent No. 604,164, dated May 17, 1898.

Application filed October 13, 1897. Serial No. 655,021. (No model.)

To all whom it may concern:

Be it known that we, CHARLES T. WILDE and CHARLES W. HINCHCLIFFE, of Lawrence, county of Essex, and State of Massachusetts, have invented an Improvement in Roundabouts, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

10 This invention has for its object the production of a roundabout comprising, essentially, a plurality of vehicles connected by radiating arms with a central rotatable hub mounted on a fixed standard, one or more of

15 the vehicles being provided with electric motor mechanism in circuit with a fixed generator, whereby when the current is turned on the vehicles will be made to travel in a circular path about a common center.

20 In the present embodiment of our invention we have shown the vehicles as floating bodies or boats of any desired shape adapted to rest upon the water in the tank and connected with arms radiating from a rotatable 25 hub mounted on a fixed standard in the tank, one or more of the boats being provided with electric propelling mechanism, the power being furnished by a fixed generator conveniently located relative to the tank.

30 Figure 1 is a plan view of a roundabout embodying our invention, the fixed generator and electrical connections being shown diagrammatically. Fig. 2 is an enlarged diametrical section thereof, broken out to save 35 space; and Fig. 3 is a detached view, in side elevation, of one of the motor-boats.

A suitable tank A, of desired dimensions, preferably circular, has at its center a base or bed plate A', Fig. 2, on which is erected a 40 tubular standard a, provided, as herein shown, with a circular raceway a' for a series of anti-friction balls or rolls a''. The standard is surrounded by a hub b, having a centrally-apertured upper end b', which travels upon 45 the balls a'', while a series of radial arms b² are extended rigidly from the lower portion of the hub, some or all of the arms being preferably tubular, for a purpose to be described.

We have herein shown the tank as filled 50 with water, the arms b² being a considerable distance below the surface thereof. Each arm has connected therewith near its outer

end a boat c, herein shown as swan-shaped and provided with seats c' for one or more persons, a bracket c² being secured transversely to the under side of each boat. Each bracket has two depending slotted ears c³, (see Fig. 3,) one near each end, the adjacent arm b² extending loosely through the ears, while collars b⁴ b⁵, fast on the arms outside 60 of the ears, prevent undue lateral movement of the boats. The boats are thus free to rise and fall relatively to the arms to pitch or rock, while still securely connected therewith, the slotted ears permitting the rise and fall of 65 the boats.

A fixed electric generator G, Figs. 1 and 2, has one of its poles connected by a properly-insulated conductor 2 with a terminal ring d, Fig. 2, above the hub b, and mounted on a 70 tube d'', fast in the standard and extended through the aperture in the end of the hub b, the terminal being insulated from the hub and tube d''. The end of the hub has mounted thereon one or more insulated commutators 75 or collecting-brushes f, which bear on the ring d, the brushes being insulated from the hub. An insulated wire 3, connected with a brush, is preferably carried through one of the arms b² and led up to one pole of an electric motor M on one of the boats, the other pole of the motor being connected by a wire 4 with one of the collars, as b⁴, on the arm.

The tank A has a metal plate 5 secured thereto, in contact with the water, and an insulated wire 6 connects said plate with the other pole of the generator G, the water completing the circuit.

The motor M drives a propeller P, so that when the current is turned on the motor-boat 90 will move through the water in a circular path, rotating the hub b and thereby the other boats of the series.

We prefer to provide two motor-boats, oppositely located, as herein shown, to thereby 95 better distribute the power.

The brushes f and ring d are protected by a cap b⁶ on the hub, and, if desired, water may be lead through the tube d'' to form a jet or fountain.

Only the upper end of the hub and the cap will be visible when the tank is filled, and the prime motive mechanism and connections are thus concealed from the eye.

Our invention is not restricted to the shape or number of boats, nor to the exact propelling mechanism herein shown, nor to the precise arrangement of electrical connections, 5 for the same may be varied or rearranged without departing from the spirit and scope of our invention.

Having described our invention, what we claim as new, and desire to secure by Letters 10 Patent, is—

1. In a roundabout, a tank, a fixed upright standard therein, a hub rotatably mounted upon the standard and having a series of radial arms, a boat connected with each arm, 15 electric motor mechanism on one of said boats, a distant generator, electrically connected with the standard, a current-collecting brush on the hub, electrically connected with the motor mechanism, and a return-wire from 20 the tank-water to the generator, the water completing the circuit, substantially as described.

2. In a roundabout, a tank, a fixed upright standard therein, supporting an insulated 25 metallic contact-ring, an inclosing hub rotatably mounted on said standard and provided with an insulated collecting-brush, radial arms extended from the hub, a boat loosely connected with each arm, an electric motor

on one of said boats, electrically connected 30 with said brush and with the water, and a fixed generator in circuit with the contact-ring and the water in the tank, substantially as described.

3. In a roundabout, a tank, a central upright standard, a hub inclosing the standard and mounted to rotate on an antifriction-bearing, a plurality of radial arms extended from the hub, boats connected with and having vertical movement relative to said arms, 40 a fixed electric generator having one terminal electrically connected with the standard and the other with the water in the tank, and an electric propelling mechanism on one of said boats, electrically connected with the water 45 and with a current-collecting brush within the hub, the arm to which said boat is connected carrying within it the circuit-wire between the boat and brush, substantially as described. 50

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CHARLES T. WILDE.

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Witnesses:

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