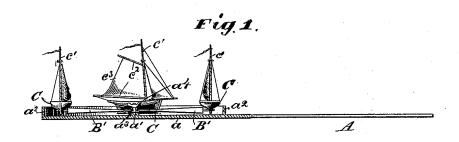
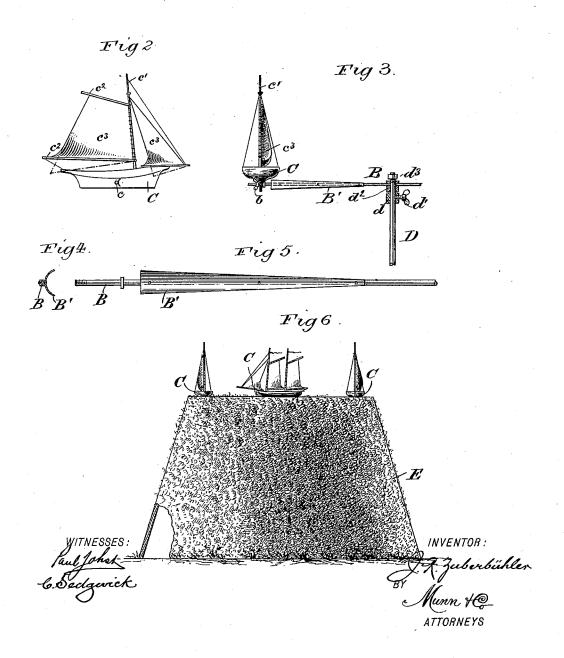
(No Model.)

J. R. ZUBERBÜHLER. WIND TOY.

No. 463,568.

Patented Nov. 17, 1891.





UNITED STATES PATENT OFFICE.

JOHANN RUDOLF ZUBERBÜHLER, OF GREENVILLE, SOUTH CAROLINA.

WIND TOY.

SPECIFICATION forming part of Letters Patent No. 463,568, dated November 17, 1891.

Application filed April 15 1891. Serial No. 388,980. (No model.)

To all whom it may concern:

Be it known that I, JOHANN RUDOLF ZU-BERBÜHLER, of Greenville, in the county of Greenville and State of South Carolina, have invented a new and Improved Wind Toy, of which the following is a full, clear, and exact description.

The object of the invention is to provide a novel and interesting toy or device which, when arranged to be carried in the hand, will afford amusement to children, or when arranged for support in a garden or lawn will form a pleasing ornament, and which, further, may be employed for keeping off birds from small fruit, seed-beds, and the like, or made available for purposes of advertising and display.

The invention is not to be confounded with windmills or wind-motors, as it is arranged solely with a view to its own rotation.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures:

Figure 1 is a sectional side elevation showing the toy adapted to be held in the hand by a child, who by running will cause the toy to rotate on its axis, this form being also adapted for support from a post, window-sill, or other elevated point. Fig. 2 is a side view of one of the miniature sail-boats of the toy. Fig. 3 is an elevation, partly in section, showing one of such boats and its supports arranged as a garden ornament. Fig. 4 is an end view of one of the radial arms. Fig. 5 is a front face view thereof, and Fig. 6 is an elevation showing the protecting-screen.

In constructing a toy in accordance with my invention a suitable central support or 40 standard is provided, from which arms radiate and support at their outer ends suitable bases or bodies, preferably in the form of miniature boats having sails arranged in a novel manner.

In the form shown in Fig. 1 the short central stud or standard a' is formed on or secured to a circular board or disk a, having a peripheral flange a² and a handle A by which the toy may be carried in the hand of a child.

50 To the standard a' radiating arms B are secured, the inner ends of said arms being inserted in a collar a^3 , which is held to the students.

a' by a wing-nut a^4 . Other means, it is evident, may be employed for effecting the connection of the arms B to the stud a'. The 55 outer end of each arm B carries a suitable sail-supporting body or base C, which is preferably in the form of a miniature boat, the end of the arm being entered in an aperture c, Fig. 2, in such boat or base and clamped by 60 a nut b. To the masts c' spars c² are fixedly secured, the several spars being arranged centrally of the boat and in longitudinal alignment. The boats may have any preferred rig. In Figs. 1, 2, and 3 they are sloop-rigged, and 65 thus include a single mast, a bowsprit, boom, and gaff, ail of which are in fixed position. The sails c^3 are secured to the fixed spars and given fullness at the outer edges, that they may belly and catch the wind in whatever di- 70 rection it may blow. The dotted lines below the sails in Fig. 2 indicate the amount of fullness given the sails. To the forward side of each arm B a retarder B' is secured, which will prevent undue velocity of the toy. The 75 retarder B' is of novel form, being concaved transversely and ranging longitudinally of the arm, that it may be most effective for its purpose. The arms B are preferably square in cross-section, except at the ends, where they 80

In Fig. 6 the device is arranged in the form of a garden ornament. In this form the arms B and their boats are supported from a standard or post D, Fig. 3, which has a collar d, that 85 is vertically adjustable by means of the setscrew d'. Above the collar d' a second collar d^2 is loosely mounted and in said loose collar d^2 the arms B are secured. A nut d^3 serves to retain the loose collar in place. When thus go arranged as a garden or lawn ornament, a screen E, of suitable fabric, is provided, the same inclosing the standard D and arms B and extending to a level with what would about be the water-line of the boats.

When the device is not to be used or when it is desired to protect it from storms, the collar d is brought lower down on its standard, the arms B and their boats being correspondingly lowered to bring them within the protection of the screen E.

In Fig. 6 the boats are schooner-rigged; but this is not essential.

My improved device thus described is pleas-

ing, useful, and ornamental, and its retarders properly govern its movements and prevent undue velocity. The retarder B' may be closed at the wider end, if desired.

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

Patent, is-

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1. In a wind toy, the combination, with suitable bases or bodies mounted on pivoted arms, 10 of sails carried by said bodies for actuating the same and concave retarders on the forward side of the said arms, the retarders projecting above and below the plane of said arms and acting to retard the movement of 15 the toy, substantially as described.

2. In a wind toy, the combination, with suit-

able bodies or bases mounted on radially-arranged arms that are pivotally supported on one end, of sails on said bodies for actuating the same and retarders ranging longitudinally 20 of said arms and concaved transversely in their forward faces, substantially as described.

3. The combination of a rotatable wind toy having propelling-sails and a screen, the said toy being vertically adjustable on its support 25 to bring it below or above the top of the screen,

substantially as described.

JOHANN RUDOLF ZUBERBÜHLER.

Witnesses:

GEO. WESTMORELAND, H. J. HAYNSWORTH.