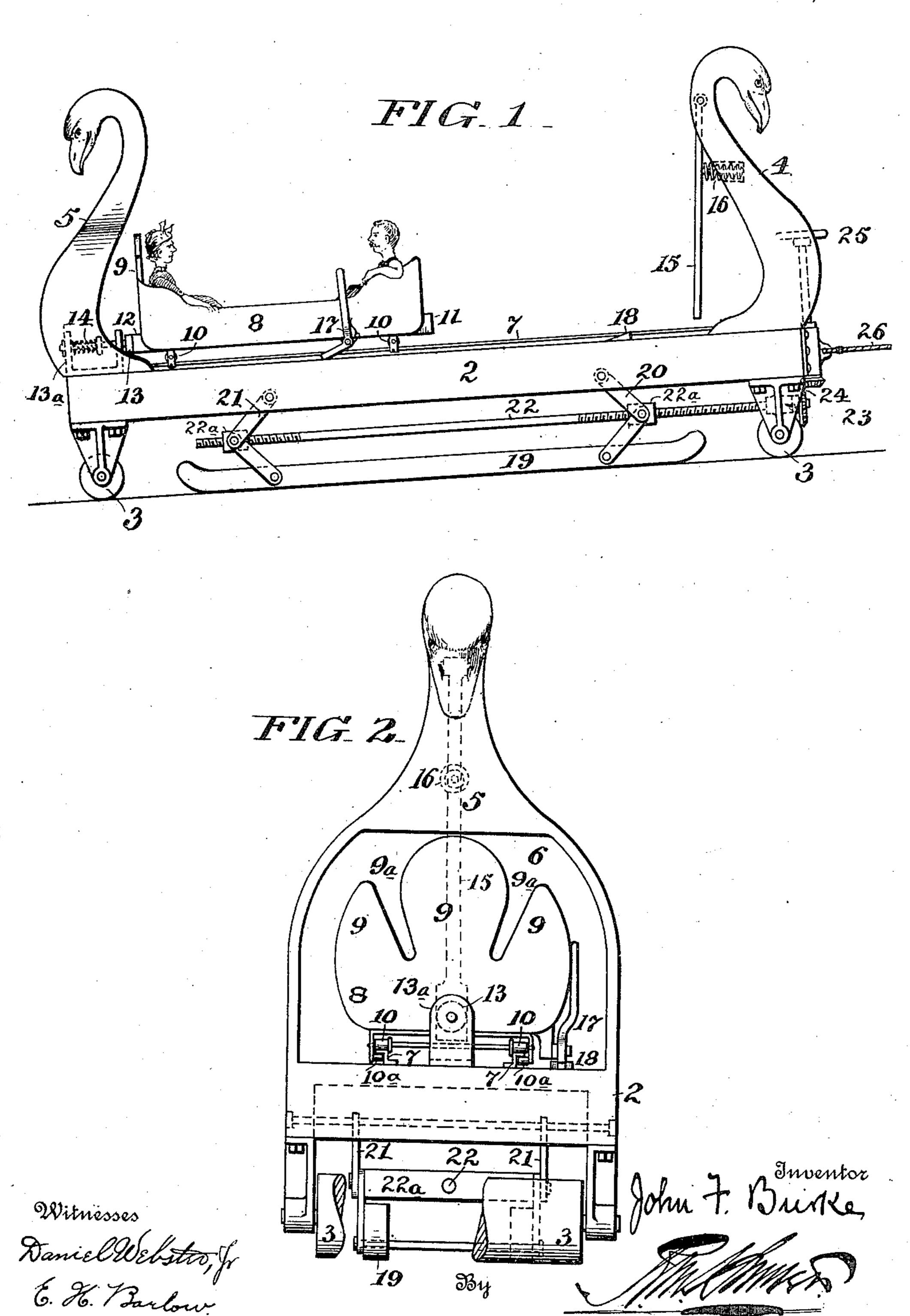
## J. F. BURKE. BATHING APPARATUS. APPLICATION FILED OCT. 14, 1910.

995,658.

Patented June 20, 1911.



THE NORRIS PETERS CO., WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

JOHN F. BURKE, OF PHILADELPHIA, PENNSYLVANIA.

## BATHING APPARATUS.

995,658.

Specification of Letters Patent. Patented June 20, 1911.

Application filed October 14, 1910. Serial No. 587,002.

To all whom it may concern:

Be it known that I, John F. Burke, a citizen of the United States, and resident of railway or trackway, as will be obvious, but Philadelphia, county of Philadelphia, and 5 State of Pennsylvania, have invented an Improvement in Bathing Apparatus, of which the following is a specification.

My invention has reference to bathing apparatus and consists of certain improve-10 ments which are fully set forth in the following specification and shown in the accompanying drawings which form a part thereof.

The object of my invention is to provide 15 a suitable apparatus adapted to surf bathing, in which the bathers may sit in a boat device or carriage to be driven or propelled by the force of the breakers which also break upon the occupants, in which, further, 20 the apparatus returns the boat or carriage automatically to its initial position so that the above described operation may be repeated with each advancing wave and breaker.

25 My invention consists in apparatus for carrying out the above specified objects which is fully described hereinafter and more particularly defined in the claims.

Referring to the drawings:—Figure 1 is 30 a side elevation of a bathing apparatus embodying my invention; and Fig. 2 is an end elevation of the same, with a portion broken away.

2 is a substantial frame supported upon 35 rollers 3 which run upon the sand beach and said frame has at its ends open structures 4 and 5 which may be of ornamental appearance as shown, or otherwise. By making these end structures open as at 6, the water 40 may flow freely to act upon the boat or carriage 8 and the occupants thereof. The frame 2 may be moved into the surf and held under the control of a cable 26 and may be, when in proper position, secured against 45 movement by any suitable means. One such means is shown as shoes 19 secured to the frame 2 by toggles 21 having cross bars 22a operated by a screw rod 22. The screw rod 22 may be rotated by miter gears 23 and 24 50 which latter may be operated by a hand wheel 25. The friction of the shoes 19 upon the sand beach will prevent accidental shifting of the frame 2. If the frame and its accessories are sufficiently heavy, they will 55 be able to maintain their position on the beach without the necessity of the shoes 19.

If desired, the apparatus may be guided out into the water upon any suitable form of this is not material to my invention.

Upon the frame 2 is arranged a trackway preferably of rails having overhanging flanges. Upon this track 7, a boat or carriage structure 8 runs, the same being provided with supporting rollers 10 and safety 65 rollers 10<sup>a</sup>. In this manner, the boat or carriage 8 may be run backward or forward upon the rail 7 between the two ends 4 and 5. At the forward end of the said boat or carriage 8, namely, the end which is directed 70 toward the incoming waves, there is provided an extended surface in the form of a fan-like structure 9, having slotted portions 9<sup>a</sup>. This construction presents an extended surface against which the waves strike to 75 propel the carriage or boat 8 up the inclined track 7 and at the same time permit the water to rush over and through the end of the boat or carriage upon the occupants. Furthermore, the boat structure may be suffi- 80 ciently tight to contain the water which would fill it so that the occupants are seated in the water and receive the rush of the water from the waves with each incoming. wave.

At the forward end of the frame 2, there is a buffer 13 carried in a suitable frame 13ª and provided with a spring 14 to receive the thrust of the carriage or boat when it runs forward to its initial position, shown in Fig. 90 1. The forward end of the boat or carriage is provided with buffer extension 12 to strike the spring buffer 13, and likewise the rear end of the boat structure is provided with a buffer extension 11 which strikes the 95 pivoted lever 15 when the boat or carriage is driven backward up the inclined railway 7 by the action of the waves. The lever 15 is hinged to the rear end 4 of the frame 2 and is spring actuated by means of the 100 spring 16. The object of the lever 15 and spring 16 is to receive the blow of the moving boat or carriage and bring it gently to rest before its return and also to assist in returning it to its initial position so as to re- 105 ceive the action of the next wave. These devices may be made in any other suitable manner so long as they operate upon the boat structure and carriage to perform the function specified. It will be understood 110 that while the forward end 5 should be made open or omitted altogether, the rear

end 4 may be made in almost any way desirable, as it is not necessary that the waves shall pass through this end. I prefer, however, to form both ends open so as to offer 5 (as little resistance as possible and thereby not disturb the position of the main frame 2.

Pivoted to the boat or carriage structure 8 is a lever 17, the short arm of which runs along the top of the frame 2 and catches 10 back of a projection 18 thereon when the carriage or boat is driven backward by the waves. In this position, the said boat or carriage would be held at the beach end of the frame 2 and with the spring 16 under 15 tension so that, if desired the occupants of the boat may control the number of reciprocations of the boat or carriage structure at will.

The operation of the device will now be

20 understood.

The frame 2 is moved out on the beach to suit the conditions of the tide and so that the force of the breakers will strike upon the extended surface 9 of the boat or carriage. 25 While there is some incline usually to the beach, as indicated in Fig. 1, this incline is, of course, not essential to the invention. When the waves drive the boat or carriage 8 backward and at the same time break 30 over the occupants, the said boat or carriage is caused to impinge against the lever 15 and compress the spring 16. After the force of the breaker has expended itself, the spring 16 acting through the lever 15 forces 35 the boat or carriage structure forward to its initial position where it is received against the buffer 13. This operation takes place with each incoming breaker and may be varied by the use of the pivoted control

40 lever 17, if desired. As the tide goes out or comes in, the frame 2 is shifted in its position so as to keep the occupants of the boat or carriage always in position to be acted upon by the breakers.

It will be evident that the boat-like vehicle may be supported upon the main frame in any suitable manner so long as it is capable of being propelled under the action of the breakers without leaving its po-50 sition with respect to the main frame, and provided moreover, that the said boat-like vehicle may be automatically returned to its initial position to be acted upon by the successive breakers. The general construc-

55 tion, therefore, may be changed to suit the wishes of the manufacturer to enable him to secure the advantages of the invention under the beach conditions which are available to him.

While I have shown my apparatus in the preferred form, I do not restrict myself to the details, as these may be modified without departing from the spirit of the invention.

Having now described my invention what

I claim as new and desire to secure by Letters Patent is:—

1. In a bathing apparatus, the combination of a frame arranged for being moved into the breakers of a beach and provided 70 with a railway, a vehicle supported upon the railway whereby it may be acted upon by the inflowing breakers to be propelled along the railway, and a spring device for receiving the blow of the moving vehicle when 75

driven forward by the breakers.

2. In a bathing apparatus, the combination of a frame arranged for being moved into the breakers of a beach and provided with a railway, a vehicle supported upon the 80 railway whereby it may be acted upon by the inflowing breakers to be propelled along the railway, a spring buffer arranged at the forward end of the frame adapted to receive the blow of the vehicle when assuming its 85 initial position to be acted upon by the breakers, and a spring device for receiving the blow of the moving vehicle when driven forward by the breakers.

3. In a bathing apparatus, the combina- 90 tion of a frame arranged for being moved into the breakers of a beach and provided with a railway, a vehicle supported upon the railway whereby it may be acted upon by the inflowing breakers to be propelled along 95 the railway, a spring device for receiving the blow of the moving vehicle when driven forward by the breakers, and a retaining device for retaining the vehicle in a temporarily stationary position relative to the rail- 100 way and holding the spring device under tension.

4. In a bathing apparatus, the combination of a frame arranged for being moved into the breakers of a beach and provided 105 with a railway having an open forward end portion through which the breakers may pass, a vehicle supported upon the railway whereby it may be acted upon by the inflowing breakers to be propelled along the 110 railway and having its forward end pro-

vided with an extended surface against which the breakers may strike, and a spring device for receiving the blow of the moving vehicle when driven forward by the breakers. 115

5. In a bathing apparatus, the combination of a frame arranged for being moved into the breakers of a beach and provided with a railway, rollers supporting the said frame, means for holding the frame against 120 movement upon the beach, a vehicle supported upon the railway whereby it may be acted upon by the inflowing breakers to be propelled along the railway, and a spring device for receiving the blow of the moving 125 vehicle when driven forward by the breakers.

6. In a bathing apparatus, a main frame arranged for adjustment upon the beach so as to be acted upon by the incoming breakers, combined with boat-like vehicle arranged to 130

be propelled longitudinally with respect to said main frame by the action of the breakers.

7. In a bathing apparatus, a main frame arranged for adjustment upon the beach so as to be acted upon by the incoming breakers, combined with boat-like vehicle arranged to be propelled longitudinally in one direction with respect to said main frame by the action of the breakers, and spring actuated devices for propelling the boat-like vehicle in the other direction whereby it is returned to its initial position to receive the impact of the next breaker.

8. In a bathing apparatus, a main frame arranged for adjustment upon the beach so as to be acted upon by the incoming breakers, combined with boat-like vehicle arranged to be propelled longitudinally in one direction with respect to said main frame by the 20 action of the breakers, spring actuated devices for propelling the boat-like vehicle in the other direction whereby it is returned to its initial position to receive the impact of the next breaker, and a buffer arranged at 25 the forward end of the main frame to re-

ceive the impact of the advancing boat-like vehicle.

9. In a bathing apparatus, a main frame arranged for adjustment upon the beach so as to be acted upon by the incoming breakers, 30 combined with boat-like vehicle arranged to be propelled longitudinally in one direction with respect to said main frame by the action of the breakers, means to prevent the boat-like vehicle leaving the main frame, 35 spring actuated devices for propelling the boat-like vehicle in the other direction whereby it is returned to its initial position to receive the impact of the next breaker, and means to retain the boat-like vehicle in 40 the position into which it is driven by the breakers and hold the spring actuated devices under tension.

In testimony of which invention, I hereunto set my hand.

JOHN F. BURKE.

Witnesses:

R. M. Kelly, E. H. Barlow.

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