Dec. 14, 1965 J. O. BECROFT 3,223,411

LOGROLLING TYPE AMUSEMENT DEVICE

Filed Feb. 9, 1962

FIG. 1

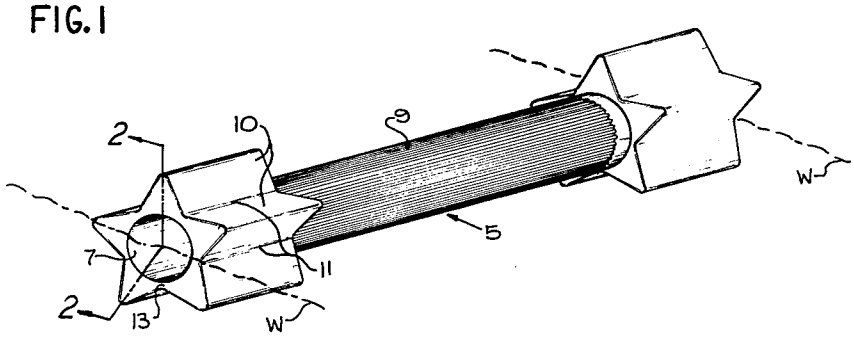


FIG. 2

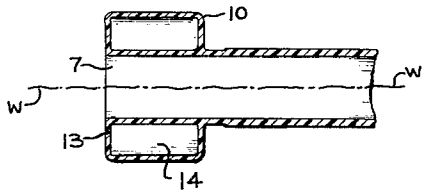
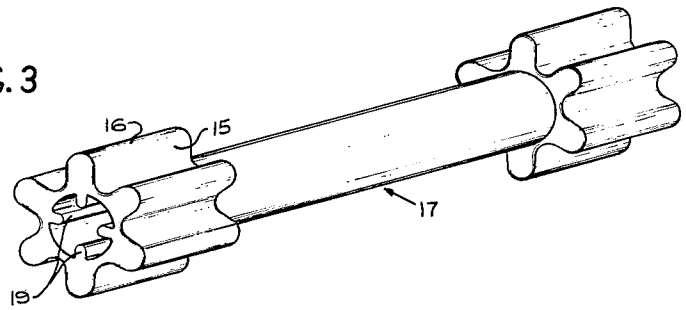


FIG. 3



INVENTOR.
JAMES O. BECROFT
BY *Lindsey, Prutzman and Hayes*
ATTORNEYS

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LOGROLLING TYPE AMUSEMENT DEVICE

James O. Becroft, % James O. Becroft, 90 Grieb Road, Wallingford, Conn.

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This invention broadly relates to water amusement or sporting devices and more particularly to logrolling-type amusement or sporting devices wherein the general object of their amusement or sport is to birl or roll the device by treading it and without losing balance and position thereon.

One of the aims of the present invention is to provide an improved logrolling-type amusement device which is simply constructed without relatively moving parts, easily transported and capable of being manufactured at an extremely low cost.

A further aim of the present invention is the provision of a logrolling-type amusement device that may be smoothly birled or rolled with a minimum of effort and that will endure repeated and rugged use without becoming inoperative.

Still another object of the invention is to provide a logrolling-type amusement device of the aforesaid character that is so constructed that it is inherently stable in use, and balancing by a user is facilitated.

Other objects will be in part obvious and in part pointed out more in detail hereinafter.

The invention accordingly consists in the features of construction, combination of elements and arrangement of parts which will be exemplified in the construction hereafter set forth and the scope of the application which will be indicated in the appended claims.

In the drawings:

FIG. 1 is a perspective view of an embodiment of the present invention shown in conjunction with a phantom water line;

FIG. 2 is a broken-away, cross-sectioned, elevational view of the present invention taken generally along lines 2—2 of FIG. 1; and

FIG. 3 is a perspective view of another embodiment of the present invention.

Referring to the embodiment shown in FIGS. 1 and 2 of the accompanying drawing, the logrolling-type amusement device of the present invention is adapted for use in a body of water and comprised of a hollow tubular body member **5**, preferably of cylindrical shape, having open ends **7** and being formed of a sufficient length to easily accommodate one or more persons thereon. In operation, the cylindrical body member is birled or rolled about its longitudinal axis by the user treading with his feet on the outer peripheral surface of the body and such treading is facilitated in the present embodiment by the provision of a circumferentially continuous series of corrugations or serrations **9** formed on the outer surface of the body and extending longitudinally thereof which provides positive footing for the user.

In accordance with one of the principal features of the present invention, the body member **5** is provided at each of its ends with a plurality of paddle portions **10** which are arranged to radially project on the outer peripheral surface of the body member and which, as illustrated, may be designed in a generally tooth shape five-pointed star-like fashion. Referring to FIG. 1, the paddle portions **10** are joined together along lines **11** and thus form hub portions **13** which surround the body member **5**. Additionally, the paddle portions **10** are buoyantly constructed with water tight hollow interiors **14** including hollow hub portions **13**, as shown in FIG. 2, and which are filled with a suitable gas such as air or the like. The

buoyancy of the paddle portions **10** thus permit only partial submergence of the body member when in use. Also, since the buoyant paddle portions are at the ends of the body member, the device is inherently stable and balancing by the user is facilitated.

In order to enable the body member **5** to move rectilinearly or angularly when birled or rolled, the paddle portions **10** are rigidly connected to or integrally formed with the body member, the latter being the case in the presently described embodiment, thereby resulting in a unitary or one-piece structure. Furthermore, the body member and paddle portions may be formed from any suitable material having relatively high impact, flexural, and cold strength properties. However, the preferable formation of the embodiment of FIGS. 1 and 2 is from a plastic such as polyethylene, polypropylene, or styrene butadine acrylonitrile copolymers.

In addition to the above-described advantages, the buoyant paddle portions **10** further function to stabilize the birling or rolling motion of the body member **5**, which, when coupled with the stabilization offered by the water taken on by the body in its hollow, as shown by the water line W, provide a device that may be smoothly rolled with a minimum of effort.

Various other types of buoyant paddle formations and constructions may be incorporated in the present invention, and, accordingly, FIG. 3 shows another embodiment thereof, by way of example, wherein a plurality of paddle portions **15** are provided at each end of the body member **17** and arranged to radially project from the outer peripheral surface of the body member in a generally six-toothed gear-like fashion. The extremities **16** of each of the paddle portions **15** are relieved or rounded so as to eliminate sharp edges and thereby lessen the probability of injurious contact with the paddle portions that may result from falls thereon by the user or otherwise.

The buoyancy in the presently described embodiment of FIG. 3 is provided by forming the paddle portions **15** from a buoyant foam plastic such as, for example, expanded polystyrene or the like.

Additionally, if it is desired to retard the birling movement of the body member without changing the number of paddle portions, a plurality of dampening vanes may be provided on the inner surface of the body member such as those designated **19** in the embodiment of FIG. 3. Furthermore, the body member **17** may be formed without the longitudinal serrations employed in the embodiment of FIG. 1; however, a friction mat, not shown, may be suitably attached to the outer surface of the body member **17** if desired in order to provide sure footing for the user.

In order to provide optimum birling results, the above-described embodiments of the present invention are constructed such that the overall height of the device taken at the end paddle portions approximates twice the diameter of the body member; however, various other relative dimensioning may be employed to provide satisfactory or desired birling results within the spirit and scope of the present invention.

From the foregoing description, it can be seen that the logrolling-type device of the present invention can be formed of a relatively simple and lightweight construction that will successfully endure excessive impact loads and weathering and that can be economically manufactured. It can further be seen that the device of the present invention requires no assembly prior or disassembly subsequent to its use and also provides an extremely interesting and challenging amusement or sport.

As will be apparent to persons skilled in the art, various modifications and adaptations of the structure above-described will become readily apparent without departure

from the spirit and scope of the invention, the scope of which is defined in the appended claims.

I claim:

1. A logrolling-type amusement device of the character described comprising a non-buoyant elongated open ended hollow cylindrical tubular body member, and a pair of longitudinally spaced similar gas-tight hollow buoyant members one of which is concentrically secured about each end of said body member; each of said buoyant members comprising a pair of similar longitudinally spaced end walls rigidly secured to said body member, and a plurality of equally spaced radially extending hollow tooth-shaped paddle portions secured to and between said end walls.

2. A logrolling-type amusement device as defined by claim 1 in which the connecting base sections between adjacent tooth-shaped paddle portions are all radially spaced outwardly from the outer wall of said body member thereby providing a gas-tight chamber about each end of said body member.

3. A logrolling-type amusement device as defined by claim 2 in which the inner wall of said body member is provided with a plurality of similar circumferentially spaced parallel inwardly projecting longitudinally extending dampening vanes.

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RICHARD C. PINKHAM, *Primary Examiner.*