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TOWABLE WATER SLED

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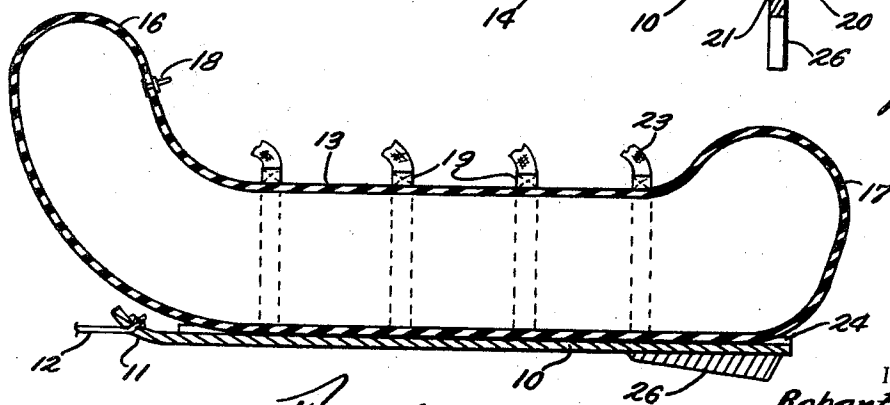
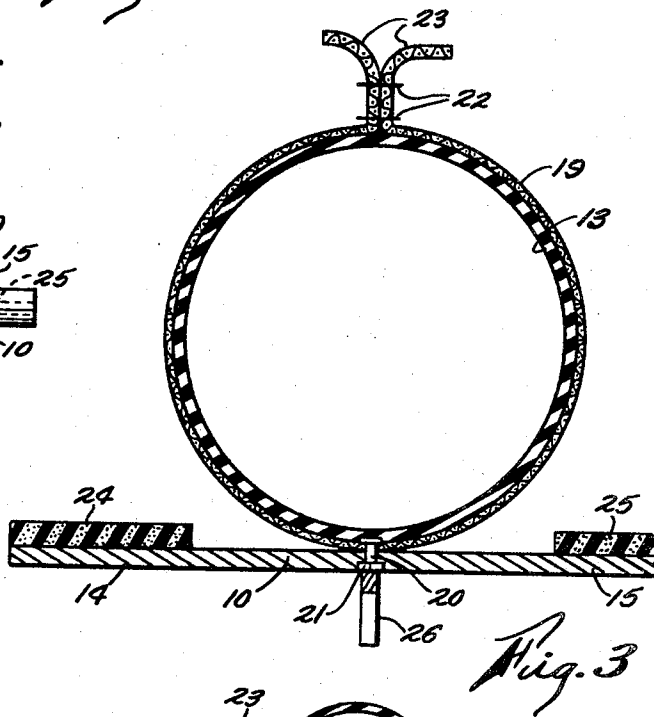
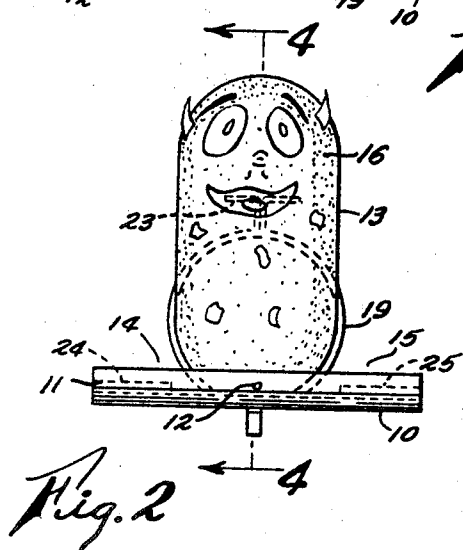
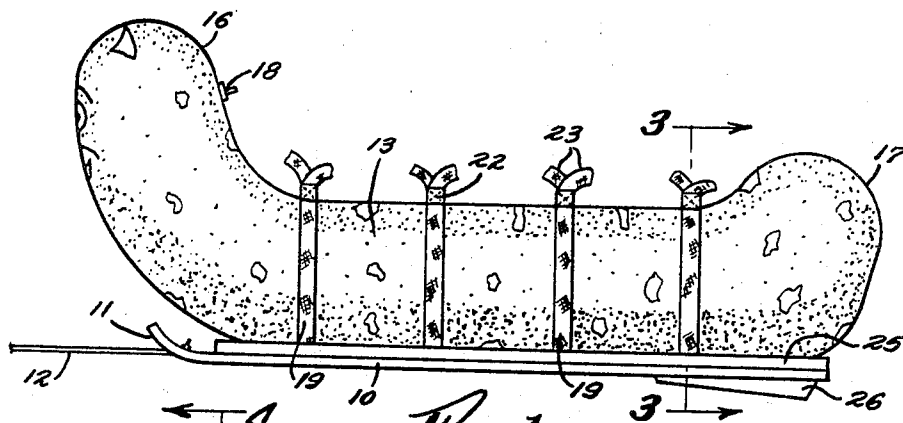


Fig. 4

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TOWABLE WATER SLED

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5 Claims. (Cl. 9—310)

The present invention relates to improvements in water sleds and is particularly directed to a towable water sled that will afford one or more persons a distinctive and pleasurable riding motion.

An object of the invention is to provide a water sled having an elongated, flexible seat mounted centrally upon a single, flat runner or board, said seat dividing the board longitudinally to provide a pair of side board portions adapted to present foot and leg engaging surfaces that furnish balancing means for riders supported upon and straddling the seat.

A related object of the invention is to provide a water sled that will effectively cushion impacts and jolts commonly experienced by riders of towed sleds and to further secure a greatly improved and novel riding motion.

Another object of the invention is to provide a water sled which is readily steerable and which may be used by one or more inexperienced riders in a safe and enjoyable manner.

A further object of the invention is to provide a simplified means for detachably mounting the flexible seat to the flat board or runner for the sled to secure easy and compact transportation and storage of the sled.

Other objects of the invention will be apparent from the following description taken in conjunction with the accompanying drawings, wherein:

FIG. 1 is a side elevational view of our towable water sled.

FIG. 2 is a front elevational view of the sled shown in FIG. 1.

FIG. 3 is an enlarged section taken on line 3—3 of FIG. 1.

FIG. 4 is a section taken on line 4—4 of FIGURE 2.

Referring in detail to the drawing the illustrated water sled comprises a single, flat, elongated and laterally restricted board or runner 10 which preferably has a longitudinal dimension at least twice its width dimension, the forward end of the board being curved upwardly at 11 to provide a lift to the board when it is initially or slowly pulled through the water by means of a tow line 12 secured to the central lower part of the curved portion 11 of the board. The free end of the line 12, according to present water sports practices, is attached to a power boat capable of pulling the board through the water at speeds that will at least support the sled and its riders and very often at much higher speeds depending upon the equipment and the skills, experience and capabilities of both the sled riders and the boat operator.

A relatively narrow, hollow and inflatable body 13 is substantially coextensive with the board 10 and is mounted centrally upon the board to longitudinally divide it into side board portions 14 and 15 (FIGS. 2 and 3). The body 13 is made of strong, flexible and resilient material such as rubber that is adapted to withstand internal pressures that occur therein when the weights of four (4) adults are fully supported thereby for simultaneous bouncing motions thereon. The forward portion 16 and the rearward portion 17 of the body 13 are curved upwardly and the body may be provided with surface decoration simulating a "sea dragon," or the like, it being understood that the bodies of other animals or objects could be simulated by surface configuration and/or decoration, if desirable. An air valve 18 may be positioned near the rear side of the curved front part 16 of the body in order that the body

may be inflated to the proper pressure for use or deflated for transportation or storage.

The means for detachably securing the body 13 to the board 10 comprises a number of straps 19 made of flexible, non-extensible material, each of said straps having its central, lower portion permanently secured to the central portion of the board by a carriage bolt 20, or the like (FIG. 3), which passes through the strap and is threaded to a nut 21 countersunk in the under side of the board 10. The upper portions of each strap are secured together by sewing 22, the free terminal ends of the straps beyond the connecting stitches forming hand holds 23 for the sled riders seated in positions upon the inflated body with their legs straddling the body and resting upon the side board portions 14 and 15.

It will be noted with reference to FIG. 3 that in inflated condition the body 13 is expanded equally against the internal diameters of all the non-extensible straps 19 whereby the body will be positively held in operative position upon the board in use. Upon deflation of the body the side wall contacts and the deflated body may be pulled out through each strap loop and folded for transportation and storage. The side board portions 14 and 15 of the sled may have cushions or pads 24 and 25, respectively, secured to their upper surfaces, said pads being formed of sponge rubber to cushion and protect the legs and feet of the riders of the sled against bruises or other injury. The board may also have a rudder 26 fixed to its rear, central underside so that the board may be steered by sidewise shifting of the rider's weight.

In use our water sled is hitched to a power water craft by the tow line 12 and one or more riders will mount the sled while it is partially or entirely submerged in the water and while the power boat and sled are motionless. After the riders have been seated upon the body 13 with their legs straddling said body and engaging the side board portions 14 and 15 and their hands gripping the handle holds 19, the power boat begins its motion and the sled will gradually rise to the surface of the water as the power boat gains momentum. After the water sled has gained momentum to be fully surfaced the board will be towed across the surface of the water at desirable speeds and because of its wide and elongated water engaging surface, irregular surface conditions on the water traversed will be transmitted directly to the board resulting in sudden impact motions and jolts in the board. The riders of the sled are protected from these sudden impacts and jolts because of the inflated and flexible body 13 upon which they are seated, said inflated and flexible condition also providing an upward and opposite cushioned motion to the riders directly proportional to the impact and jolting motions. These motions may be compounded and/or deleted by motions imparted to themselves by the riders, thus providing a soft, cushioned ride that is distinctive and pleasurable.

Steering of the sled is effected by the rider seated upon the resilient body 13 with his feet or legs engaged upon the side board portions 14 and 15 and his hands grasping the hand holds 23. By shifting his weight from side-to-side the resilient body will be made to swing around the strap securing bolts 20 as pivots, in response to the shifting weight. The swinging motion will be a cushioned one in either lateral direction because of the resilient body, such cushioned motion building up gradually as the body moves away from its upright central position on the board thus precluding sudden steering motions that might overturn the sled.

In the event our water sled would tip over while in motion the sled will right itself without injury to the riders, the tow line or the towing boat because of the upstanding forward portion 16 of the body 13 and the curved forward end or toe 11 of the board 10. As the moving sled

tips over on its side the forward portion 16 of the body will come in contact with the water thus preventing the board from turning over beyond a list of say 90°, and as the listing board is pulled through the water the forward curved end or toe 11 turns the board to one side with respect to the toe line which tends to right the sled in the water.

What is claimed is:

1. A towable water sled comprising a flat, rectangular water planing board having a longitudinal dimension at least twice that of its width dimension; a narrow, elongated and resilient seat body positioned on top of the longitudinal center portion of the board and being uniformly flexible and resilient throughout its longitudinal extent and substantially coextensive with the board; said body dividing the board longitudinally to provide laterally opposed side board portions; and means mounting the body upon the board.

2. A towable water sled defined in claim 1 wherein the body is hollow and inflatable and the means mounting the body on the board are non-extensible strap loops, and each strap having its central portion connected to the board and its end portions secured together.

3. A towable water sled defined in claim 2 wherein the terminal ends of each strap beyond the securement provide hand grips for the rider.

4. A towable water sled defined in claim 1 wherein the water planing board has an upwardly curved forward end, and the forward end of the seat body has an upstanding curved portion thereon.

5. A towable water sled defined in claim 4 wherein the upstanding forward portion of the body is circular in lateral section and has an upwardly and forwardly curving contour.

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