M. C. WHITE.

AQUATIC DEVICE.

APPLICATION FILED JULY 6, 1917.

1,315,267. Patented Sept. 9, 1919.

Fig. 1.

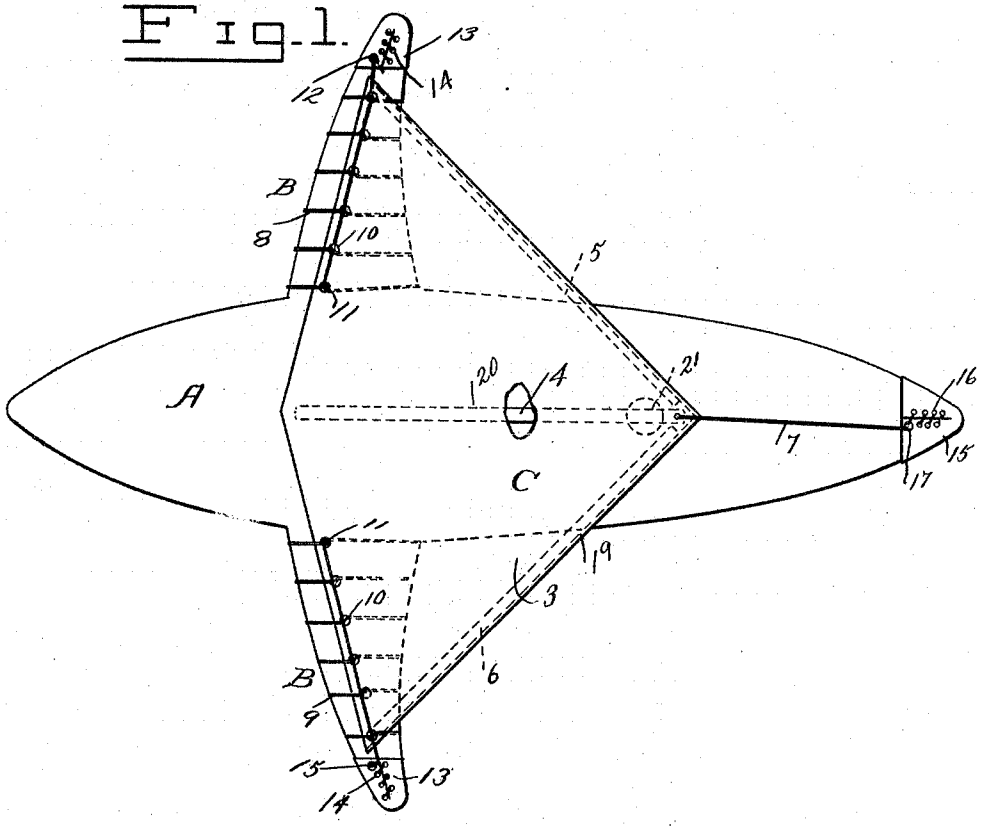
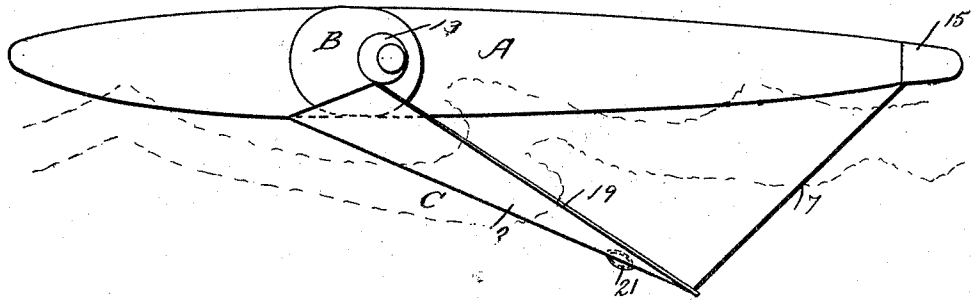


Fig. 2.



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UNITED STATES PATENT OFFICE.

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AQUATIC DEVICE.

1,315,267. Specification of Letters Patent. Patented Sept. 9, 1919.

Application filed July 6, 1917. Serial No. 179,019.

To all whom it may concern:

Be it known that I, MORRIS COLUMBUS WHITE, a citizen of the United States, residing at Hollywood, Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Aquatic Devices, of which the following is a specification.

This invention relates to aquatic devices, and more particularly to such devices usable for riding, skimming, navigating, floating and operating in surf. Many devices have been produced for use in the surf, and for supporting one or more persons and taking advantage of the shoreward travel of the waves or the surf resultant upon the breaking of the waves, for purposes of landing from boats and ships and purely for sport, amusement and recreation. All of them are more or less subject to the difficulties and objections incident to want of stability, dirigibility and uncertainty in response to the action of the waves and surf. In accordance with the present invention, I provide a device of this character comprising a suitable buoyant body, or float, which is provided with means or a member which cooperates with the supporting medium, to give the proper stability to the device, either in relatively still water or sea-way, or in the surf, and which likewise assists materially in holding the device to a proper course, and furthermore permits the device to take advantage of the shoreward travel of the waves and surf, for purposes of propulsion. Likewise, the said means or member, preferably applied to the nether portion of the buoyant body serves as a protection or reinforcement for the same, avoiding frictional injury due to the action of sand, gravel and the like, to such buoyant body. It is manifest that the buoyant body may be made in a wide variety of forms and organizations, and that the means or member applied thereto for the purposes stated may likewise be widely varied in construction, mode of application, arrangement and function. While I have shown in the drawing, and will hereinafter particularly describe one such form of buoyant body and attached means or member comprising in entirety an aquatic device embodying the invention, it will be understood that my invention may be applied to or embodied in the structures of many other devices and buoyant or water-riding or surf-riding devices, such as boats, rafts, floats, surf boards, inflatable cushions and mattresses, toboggans, canoes and the like.

The invention has for its object to provide an improved aquatic device of the general character and nature stated which will be superior in point of relative simplicity and inexpensiveness of construction and organization considered in connection with facility in assembling and disassembling or attachment and detachment of parts, convenience, reliability and positiveness in use and service, compactness in form, and durability and freedom from liability to get out of order or to fail in service.

With the above and other objects in view, the invention consists in the novel and useful provision, formation, combination, association, arrangement, mode of application, and inter-relation of parts, members and features, all as hereinafter described, shown in the drawing, and finally pointed out in claims.

In the drawing:

Figure 1 is a bottom plan view of an aquatic device constructed and organized to embody the invention; and

Fig. 2 is a side elevation of the same together with a dotted line representation of a surf formation illustrated as co-acting with the same to produce particular features or advantages attaching to the invention.

Corresponding parts in both figures are designated by the same reference characters.

Referring with particularity to the drawing, A designates a buoyant body of any preferred and suitable form and type, and preferably collapsible or deflatable and capable of inflation by introduction of compressed air through a conventional pump connection (not shown), B designate lateral fins or outriggers or stabilizing members likewise preferably buoyant and inflatable and the interior chambers of which may communicate with the interior chamber of the inflatable body A so that said fins and the body may be jointly inflated. Such fins or outriggers B are preferably, although not necessarily, disposed in opposite relation and toward the forward end of the body A. C designates the improved means or member with which such body A and its fins B are provided, and serving to perform a further stabilizing function, to assist in steering the entire aquatic device, and to utilize the force of moving water or surf in propelling the

entire device. Such member or means C is preferably disposed beneath the body A and the fins B, and in such position provides a shield or means of protection for the nether surface of such members A and B, protecting the same against the abrasive or frictional damaging effects of sand, pebbles, gravel and other substances and objects.

In one preferred and advantageous form, such means or member C may, as shown comprise a flap, apron or sheet 3 of canvas or other textile or suitable flexible material, which is provided with a stay member 4 extending longitudinally thereof preferably in the median portion thereof, and with other stays or reinforcements 5 and 6 ranging from the rearward terminal portion of such apron 3 laterally and preferably forwardly along the rearward edge portions thereof. In the drawing such flap or apron 3 is shown as approximately triangular in form, with two of the points of such triangular formation respectively beneath the fins B, and the third of such points constituting the rearmost terminal portion of such flap or apron. The forward edge portion of such flap or apron may be curved or may produce an obtuse angle the point of which may be disposed beneath the member A intermediate of the fins B. I likewise provide a stay 7 which extends from the rearmost point of the flap or apron 3 to a point of attachment adjacent to the rearward end of the member A, and such stay may be a rope, cord, or other flexible device.

To attach the apron or flap 3 to and beneath the members A and B, I find it expedient and satisfactory to provide suitable lashings 8 and 9 one to be applied to each of the fins B, and to be lashed about such fin and rove through suitable eyelets 10 which are provided in the leading or forward edge of the apron 3. One end of each such lashing is made fast as by a knot, in the innermost eyelet 10, as at 11, and the free end, after being passed about the respective fin and through the respective eyelets may be made fast or knotted in an eyelet 12 provided in a boot or jacket 13 laced, as at 14 onto the tip or extremity of the respective fin. Likewise a similar boot or jacket 15 will be lashed, as at 16, to the rearward end portion of the member A, and provided with an eyelet 17 to which may be knotted the free end of the stay 7, the fixed end of which stay may be knotted to an eyelet 18 in the rearmost tip of the apron 3.

The stays 4, 5 and 6 may consist of flexible bands of suitable material, such as light thin steel, and the same are suitably stitched into the rear edge portions of the apron 3 as at 19, and likewise into a plait or fold of the apron 3, in the median portion thereof, as at 20. The apron 3 may, if desired or necessary, be weighted adjacent to its rearmost portion, as at 21, so that the apron will have a constant tendency to assume a lowered or depressed position providing a pocket beneath it or between it and the members A and B, to receive the water and produce the desired stabilizing, steering and propelling effects or any or either of the same in accordance with the conditions met with in service.

It will be manifest that the means or members C, comprising the sheet or apron 3, may be made in many designs, shapes and formations, and of many different materials, and applied in many ways to buoyant aquatic devices or bodies, and may equally readily be detached therefrom. When in position for service, such means or member C, depending upon its form and construction and arrangement, may be relied upon to effectively propel, balance or stabilize and aid the steering of the buoyant body or device to which it is applied or attached. As will be seen from the accompanying drawing, and particularly from Fig. 2, when the device including the means C is used in the surf, and when such device is headed toward the shore, the shoreward moving waves and broken waves or surf, entering the pocket between the means C and the member A, will positively and effectively propel the aquatic device shoreward, and the impounded or impressed or chambered water will likewise act as a water ballast to stabilize the device both transversely and longitudinally, and will prevent the slewing or turning of the device and hold it to a substantially true course. Likewise, when the shore or beach has been reached, the flap or apron 3 constituting such means C will be brought up against the body member A, the water being thereby expressed and such apron 3 serving as a shield or protector for the body and in part or in the main for the fins B to prevent damage or injury by contact with or friction of sand, gravel and the like.

The device in the form shown and in many similar forms may be conveniently carried from point to point and collapsed and packed in small compass after use and readily inflated into working operative form. Likewise, when the apron or flap 3 becomes unduly worn and unserviceable it may readily be replaced by a fresh one.

Having thus disclosed my invention, I claim and desire to secure by Letters Patent:

1. An aquatic device including an elongated buoyant body and an apron carried by and inclined downwardly and rearwardly from the buoyant body, said apron coöperating with the buoyant body to form a pocket for engagement with a mass of moving water beneath the body.

2. An aquatic device including an elongated buoyant body, and a transversely extending apron carried by and inclined downwardly and rearwardly from the body, said

apron being collapsible against the body and coöperating with the body to form a pocket to engage a moving mass of water under the body.

3. An aquatic device including an elongated buoyant body, a transversely extending apron carried by the body and inclined downwardly and rearwardly therefrom, and stays applied to the edges of the apron to hold the same distended, said apron cooperating with the water to form a pocket to receive a moving mass of water under the body.

4. An aquatic device including an elongated body, a transversely extending apron carried by the body and inclined downwardly and rearwardly therefrom, the sides of the apron converging rearwardly, stiffening members applied to the converging edges of the apron, and a stay for holding the apron in position, said apron coöperating with the body to form a pocket to receive a mass of moving water.

5. An aquatic device including an elongated buoyant body, a transverse apron carried by and inclined downwardly and rearwardly from the body, said apron being collapsible against the body, a weight applied to the free end of the apron for swinging it downwardly, and a stay for holding the apron in position, said apron coöperating with the bottom of the body to form a pocket to receive a moving mass of water.

6. An aquatic device including an elongated buoyant body provided with lateral stabilizing members, and a transversely extending apron connected to the body and stabilizing members and inclined downwardly and rearwardly from the body for coöperation therewith to provide a pocket to receive a mass of moving water.

7. An aquatic device, including an elongated buoyant body provided at an intermediate point in its length with laterally projecting stabilizing members, an apron extending transversely across the body and along the stabilizing members, said apron being collapsible against the body, a weight for swinging the apron downwardly into an angular position with respect thereto, and a stay for holding the apron in position, said apron coöperating with the body to provide a pocket to receive a mass of moving water.

8. An aquatic device including an elongated buoyant body provided at an intermediate point in its length with lateral stabilizing arms, a flexible apron extending transversely across the body and along the stabilizing arms, said apron being collapsible against the body, stiffening members applied to the depending portion of the apron to hold it in a distended position, means for swinging the apron into an angular position with respect to the body, and a tie member between the swinging end of the apron and the rear end of the body.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MORRIS COLUMBUS WHITE.

Witnesses:

FRANCIS L. ISGRIGG,

J. SHULT.