June 9, 1925. 1,541,100

C. S. BARRETT

SWIMMING PADDLE

Filed July 24, 1924

Fig. 1.

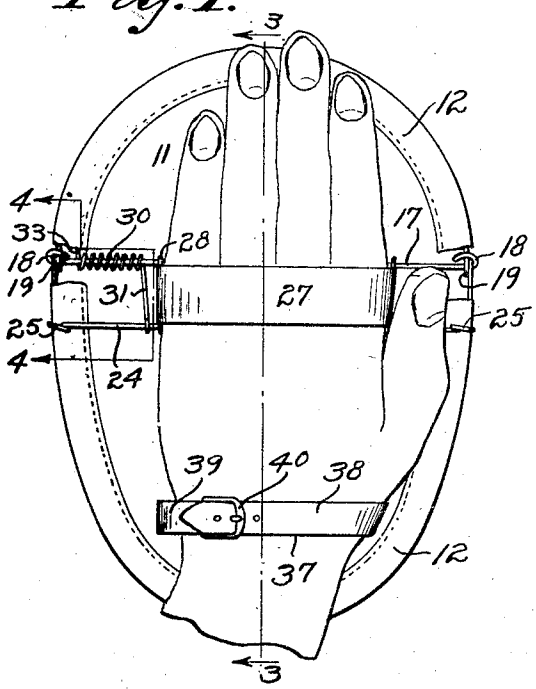


Fig. 2.

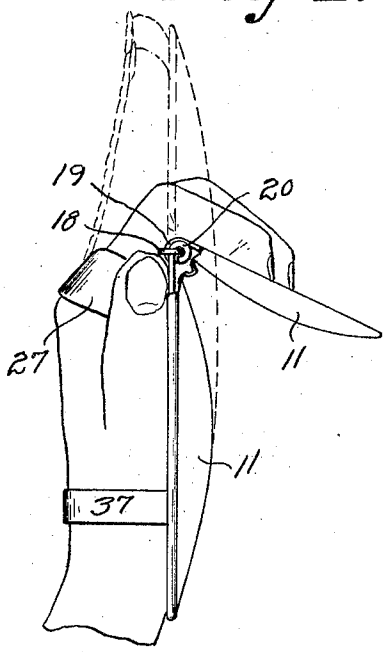


Fig. 3.

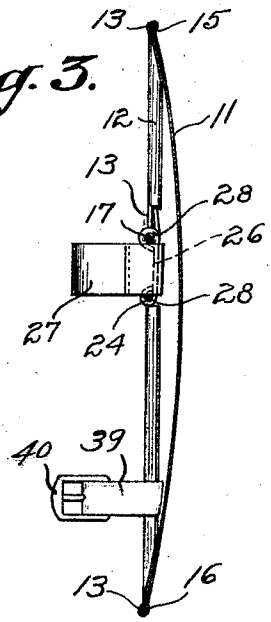


Fig. 4.

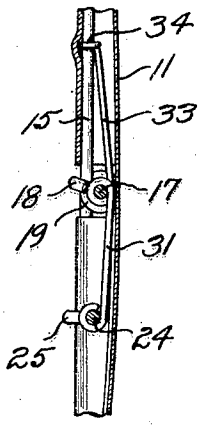
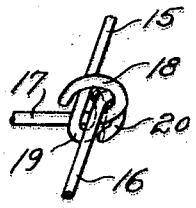


Fig. 5.



INVENTOR:
CHARLES. S. BARRETT,
BY
Frank Cushman
ATTORNEY.

Patented June 9, 1925. 1,541,100

UNITED STATES PATENT OFFICE.

CHARLES S. BARRETT, OF VENICE, CALIFORNIA.

SWIMMING PADDLE.

Application filed July 24, 1924. Serial No. 727,896.

To all whom it may concern:

Be it known that I, CHARLES S. BARRETT, a citizen of the United States, residing at Venice, in the county of Los Angeles and State of California, have invented a new and useful Swimming Paddle, of which the following is a specification.

This invention relates to aquatic devices and it relates particularly to swimming paddles arranged for attachment to the hands of the user for the purpose of facilitating swimming.

It is an object of this invention to provide a swimming paddle which will provide a propelling surface shown as ovoidal in outline much larger than is furnished by a hand.

It is a further object of the invention to provide a swimming paddle having a propelling surface capable of disposal, during the return stroke of the hand on which it is used, so that it may be substantially reduced in area, offering a greatly diminished resistance.

It is a still further object of the invention to provide automatic means for returning said paddle from a reduced or returning position into propelling position.

It is also an object of the invention to provide, in a device of this character, an adjustable palm band which renders it readily applicable to either hand.

It is also an object of this invention to provide a swimming paddle of very simple and inexpensive design, durable in construction and efficient in operation, all of which qualities contribute to provide a superior paddle.

Further objects and advantages of my invention will appear from the following description of an advantageous embodiment thereof, taken in connection with the appended claims and the accompanying drawings, in which—

Fig. 1 is a face view of a paddle including essential features of my invention and showing it mounted on a hand.

Fig. 2 is a side view showing the disposal of the paddle in folded or returning position.

Fig. 3 is a section taken as indicated by the line 3—3 of Fig. 1, the hand being eliminated in this view, so as to clearly show the construction of the paddle.

Fig. 4 is a fragmentary sectional view taken substantially as indicated by the line 4—4 of Fig. 1, this view depicting a preferred means for automatically returning and resiliently retaining the paddle in propelling position.

Fig. 5 is a fragmentary view, showing an advantageous manner in which the frame construction of the paddle may be hinged together.

As shown in the drawings, 11 represents a web member which is preferably elliptical or ovoid in shape, and which has a peripheral seam 12. The web 11 may be made of any material which is practically impervious to water, such as a rubberized or other fabric. Secured by the seam 12 of the web 11, is shown a web-supporting and tensioning peripheral frame 13, which is intended to hold the web in flat disposition. The frame 13 preferably comprises a finger frame portion 15 and a palm frame portion 16, which may be hinged together as shown in Fig. 5. A cross strut 17 is provided with eyes 18 at each end thereof. At each end of the member 15 and the member 16 are provided eyes 19 and 20 respectively, these eyes being preferably secured to the eyes 18, in substantially the manner shown, by a hinge arrangement of very simple and inexpensive construction. Slightly below the cross strut 17 is shown a cross brace 24, which has eyes 25, by which it is secured to the palm frame 16, for the stabilizing thereof.

Secured to the frame 13 by means of band supporting members 26 is shown a palm band 27, the band supporting members 26 being provided with eyes 28 through which the cross members 17 and 24 extend. It is advantageous to make the palm band 27 from an elastic material, so that no adjustment is necessary when attaching to a hand; but, by the described construction, an adjustability of the position of the band 27 relative to the frame and web of the device may optionally be provided. A coil spring 30 is shown as situated upon the cross strut 17 and as having an arm 31 which extends to and is secured to the cross brace 24, for holding it in correct position, this spring arrangement 30 being clearly shown in Fig. 4. Extending from the spring 30, at the end opposite from the arm 31, is a leg 33, shown as secured at 34 to the finger frame 15, for holding the same flat as in Figs. 1, 3 and 4. This spring arrangement constitutes a means for resiliently returning

and retaining the device in what may be termed its propelling position, or that position in which the web portion is flat and provides its greatest effective area. Near the lower end of the palm portion and secured to the web 11 in any suitable manner is a wrist band 37, which may be comprised of cooperating straps 38 and 39, which may be adjustable through a buckle 40.

In using the device, a hand, as shown in Figs. 1 and 2, is arranged so that the fingers extend through the band 27 and so that the knuckles of this hand rest substantially under the palm band 27, the thumb being optionally positioned in any comfortable manner outside the band, as shown in the drawings. By reason of the adjustable arrangement of the palm band, the hand may be positioned in a comfortable and effective manner upon the device. It will also be seen that the same paddle may be used for either hand, as the band 27 may be central or it may be shifted so as to allow the positioning of the thumb on either side thereof, the wrist strap 37 being in any case secured around the wrist substantially as shown in Fig. 1. In swimming, during the propelling stroke, the hand is held flat as it ordinarily would be without the paddle, this allows the paddle to rest in flat or propelling position, giving the swimmer greater power and more speed than he would have without the paddle, and occasioning less exertion. During the returning stroke of the hand, the fingers thereof are bent as shown in Fig. 2. This forces the paddle into folded or returning position against the action of the spring 30. In this position, the effective area thereof is considerably reduced, as will be seen from Fig. 2, so that the paddle will offer little resistance to the advance of the swimmer.

In practice, my invention has proven very successful. It increases very greatly the efficiency and pleasure of swimming. The device is also very economical, and, by reason of the simple construction thereof, it is light in weight and is not cumbersome to wear.

Although I have herein described one complete embodiment of my invention, it will be understood that various features thereof might be independently employed and also that various modifications might be made by those skilled in the art, without the slightest departure from the spirit and scope of my invention, as the same is indicated above and in the following claims.

I claim as my invention:

1. A swimming paddle comprising: a tensioned web ovoidal in outline, said web providing a propelling surface, supported by a peripheral frame and said frame comprising two wires bent to conform with said outline and capable of movement into a folded position.

2. A paddle as defined in claim 1 comprising: means for returning said paddle into a propelling position.

3. A swimming paddle comprising: a hinged frame; a web supported by said frame; and means for resiliently returning said frame to flat or propelling position.

4. A paddle as defined in claim 3 in which said means is a spring on a cross strut.

5. A paddle as defined in claim 3 but comprising cross braces for said frame.

6. A paddle as defined in claim 3 provided with an elastic palm band secured thereto.

7. A paddle as defined in claim 3 provided with an elastic palm band adjustably secured thereto.

8. A paddle as defined in claim 3 comprising: cross braces for said frame and an elastic palm band, said palm band being adjustably supported by said cross braces.

9. A swimming paddle comprising: a web having a peripheral seam; a frame secured by said seam, said frame comprising a finger portion and a palm portion hinged together; a spring for retaining said frame in flat disposal; cross braces secured to said frame; a palm band laterally adjustable on said cross braces; and a wrist band secured to said web.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 18th day of July, 1924.

CHARLES S. BARRETT.