Jan. 16, 1923. 1,442,746

P. J. TIMBERLAKE.
SWIMMING APPLIANCE.
FILED MAY 29, 1922.

2 SHEETS-SHEET 1

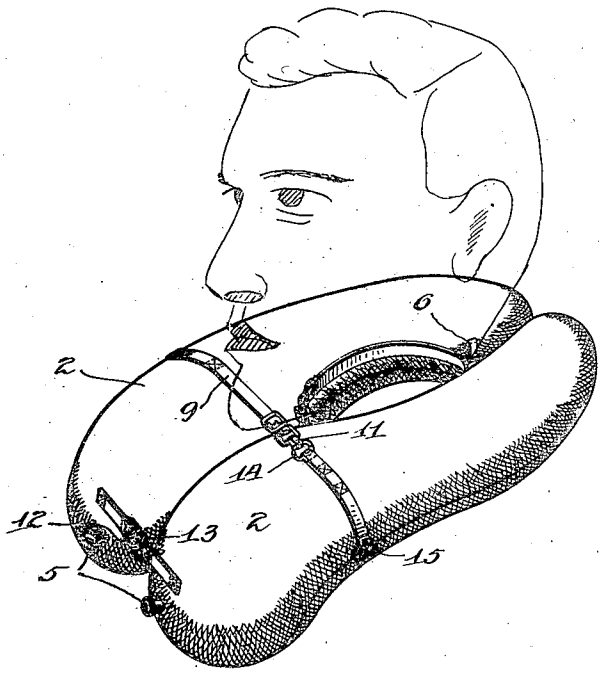


Fig. 1.

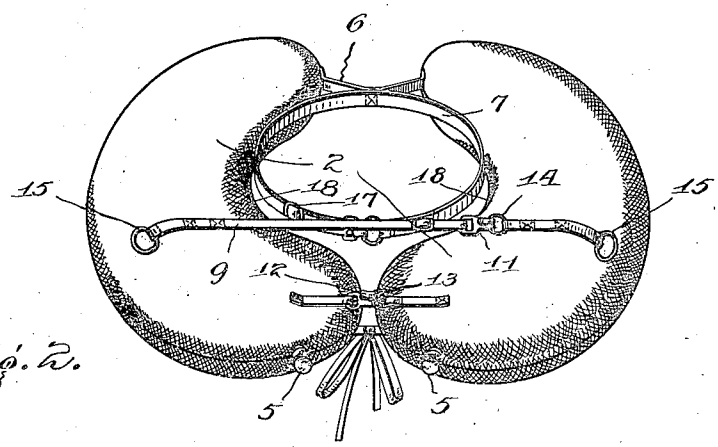


Fig. 2.

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2 SHEETS-SHEET 2

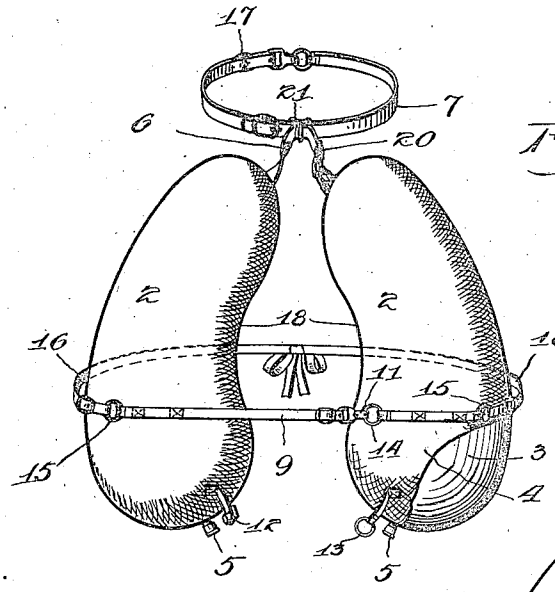


Fig. 3.

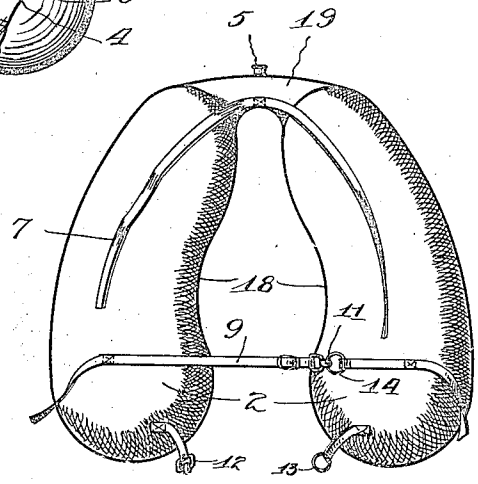
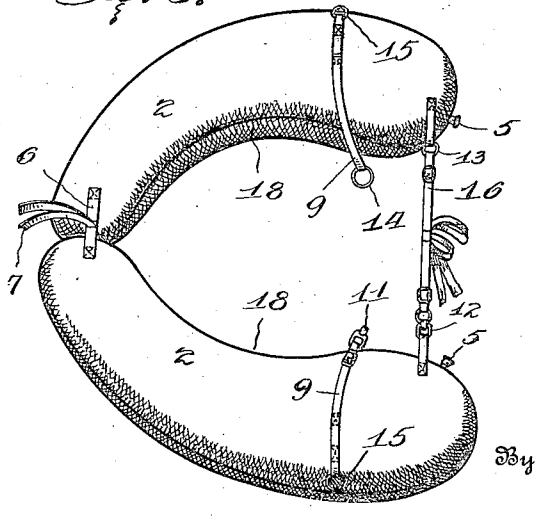


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

PAUL J. TIMBERLAKE, OF JACKSON, MICHIGAN.

SWIMMING APPLIANCE.

Application filed May 29, 1922. Serial No. 564,485.

To all whom it may concern:

Be it known that I, PAUL J. TIMBERLAKE, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Swimming Appliances, of which the following is a specification.

My invention relates to a swimming appliance to be used by bathers, and particularly by persons learning to swim. It comprises a pair of buoyant members and harness by which they are connected when secured to the body of the wearer in one or another position. The object of the invention is to produce a buoyant swimming appliance that may be adjusted to the person according as the wish of the wearer may dictate, or as may be suggested by a teacher giving instructions in swimming. It is well known that the position of the center of gravity of the body of one person differs from that of another from physiological reasons, such as the relative lung capacity, relative weight of the lower limbs, disposition of fat, etc. These individual differences and peculiarities make it desirable, under the advice of a skilled instructor, to apply a buoyant device, when used to give confidence and assistance to one learning to swim, to one part of the body of one individual, and to another part of the body to a different individual; and my invention permits this shifting of the appliance and adapting it to various parts of the body in an easy manner and without the necessity of complicated or cumbrous harness.

In the accompanying drawings wherein my invention is illustrated,—

Figure 1 is a perspective view of the device applied about the neck of a swimmer;

Fig. 2 is a top plan view of the parts assembled as represented in Fig. 1;

Fig. 3 is a rear view with the parts as they would be arranged when applied across the shoulders of a swimmer.

Fig. 4 is a plan view illustrating a construction of the buoyant members different from that shown in the other views;

Fig. 5 is a detail view illustrating a feature of construction not shown in other views.

The appliance comprises two buoyant members 2, 2, formed with inner curved edges 18, the general contour of the members 2 being preferably kidney-shaped. In practice I prefer that the members 2 should be bags adapted to be inflated with air, being either entirely separate from each other, as represented in Figs. 1, 2 and 3, or united by a hollow flexible neck 19, as represented in Fig. 4. The bags 2 should be constructed of thin flexible material that is air and water proof and may be formed of a single thickness of material, such as rubber in some form; but I prefer the arrangement illustrated wherein there is an inner air bag 3 of rubber surrounded by a stout fabric bag 4. The inflatable members 2 are provided with air valves 5 of suitable construction.

The larger ends of the bags, when of the shape shown in the drawings, I designate the front ends, since these lie under the chin when the appliance is worn about the neck, as represented in Fig. 1; the other, smaller, ends being designated the rear or back ends. The latter are connected, and I have shown two ways of effecting such connection. In Fig. 4 the connecting member 19 is a hollow neck constituting an air conduit between the two bags, the air valve being located in said neck so that both bags may be filled through a single valve. The neck is of such size and construction as to be flexible, permitting the bags to be readily adjusted when the device is applied to the person.

A more simple connection between the smaller or rear ends of the buoyant members 2 is illustrated in the other views of the drawings and consists of a strap 6 which may be formed of a single piece of tape secured at its ends in any suitable manner to the bags, as represented in Fig. 2, or of two parts adapted to be united and one of them looped and provided with a slide 20, thus making the connecting strap extensible. A neck band 7 is secured to the connecting strap 6, either by being permanently stitched thereto, as represented in Fig. 2, or by means of a detachable fastener 21, as represented in Fig. 3. The neck band is shown as being provided with a connecting clasp by which its ends may be united and is extensible as to its length, one end thereof being doubled upon itself and provided with a slide 17.

9 indicates a strap adapted to pass under the chin of the wearer when the appliance is worn about the neck, as represented in Fig. 1, and which for that reason is termed the chin strap. It unites the opposite bags

2, being connected to each at about the transverse middle thereof. The opposite ends of the chin strap are adapted to be united as by a hook 11, carried by one part, engaging with an eye or ring 14, carried by the other part. The chin strap is extensible as to its length, permitting the appliance to be adjusted to the person of the one using it. When the several parts of the appliance are arranged about the neck of the person as shown in Fig. 1, the chin strap 9 serves to hold the bags in place about the neck, preventing them from rising. By connecting the opposite ends of the chin strap with the bags at about the transverse middle portions of the latter the tendency is, when the strap is drawn fairly tight, to roll the bags slightly, lifting their outer edges and pressing the inner concave edges closely about the neck of the wearer, thus giving to the user of the device a sense of security that is wanting if the bags are loose and free to move upon the person. In order to improve the fit of the appliance and to hold the front ends of the bags down against the upper portion of the chest, I unite such forward ends of the bags by means of a fastener, such as a hook 12 and eye 13, secured, respectively, to the upper sides of the said forward end portions of the bags. This fastener holds together the said end portions of the bags and prevents them from being lifted up from the chest of the user and separating, as would be the tendency if they were left free.

Should the user of the appliance prefer to wear it across his shoulders the parts are arranged as shown in Fig. 3. When thus worn the bouyant members 2 lie across the shoulders of the wearer with their smaller ends upward and their concave sides toward each other. The fastener, consisting of the hook 12 and eye 13, is disconnected, while the chin strap is extended so as to permit the larger ends of the bags to separate farther than do the smaller ends. The bags are so applied to the person that the straps 9 extend across the outer sides of the buoyant members, holding them against the person of the wearer and preventing them, in co-operation with the body straps, to be referred to, from floating away from the body. Body straps 16, connected at 15, 15 with the bags or buoyant members 2, are then passed about the body of the wearer and tied, or otherwise united. The connections 15 with which the straps 16 engage are preferably secured to the bags near their outer edges and between the middle portion thereof and the enlarged or forward ends.

If the user of the appliance should prefer to wear the buoyant members 2 across his chest instead of over his shoulders the arrangement shown in Fig. 3 will be maintained, except that the parts will be shifted half way around the person, thus bringing the connecting strap 6 in front of and below the chin instead of at the back of the neck. In applying the device either across the shoulders or the chest, as has just been described, the neck band 7 is enlarged to the desired extent, and serves to hold the buoyant members from slipping down below the desired positions upon the body. This neck band is not an essential feature when the appliance is used as represented in Fig. 1, although it is customary to secure it about the neck as represented in the drawings even when the parts are thus used.

It will be seen by reference to Fig. 3 that the strap 9 and the connections between it and the loops 15, with which the body straps 16 are connected together, constitute a continuous band extending across the outer faces of the enlarged end portions of the buoyant members 2. This arrangement prevents undue strain being put upon the covering of the buoyant members when the body straps are drawn tight and fastened.

Should it be desired to wear the appliance about the waist the neck band 7 is unfastened, its ends either being left loose or else the band entirely removed. The chin strap 9 is disconnected, the buoyant members then being united only by the strap 6 (or its equivalent, as the connecting neck 19), when the parts 2 are placed about the waist of the wearer with their concave edges next the person and there secured by means of the body straps 16, which in this instance are fastened to the connections 12 and 13 at the larger ends of the parts 2, that is, the ends opposite to those united by the strap 6.

Each adaptation and application of the device to the person may be easily accomplished; and, as is apparent from the drawings and this description, requires only very simple harness. By the use of the latter, however, the buoyant members are firmly and comfortably secured to the person, the various straps and bands which constitute the harness being so arranged and united with the buoyant members that, when properly adjusted, whatever be the position of the said members upon the body, they are firmly held in place so that movements thereof relative to the person are reduced to a minimum.

The connections that unite the back ends of the buoyant members 2 are flexible and very much smaller, in cross section, than are any portions of the said members, in order that when the appliance is used about the neck such connection does not interfere with the free backward movement of the head.

What I claim is:—

1. A swimming appliance, comprising a pair of buoyant members adapted to be placed about the neck of a user, flexible

means for connecting the rear ends of the said buoyant members, and a strap adapted to pass under the chin of the user connected with the forward portions of the buoyant members, the latter connection being separable to permit application and removal of the appliance to the person.

2. A swimming appliance such as described in claim 1 where the chin strap connections with the respective buoyant members are made at approximately the transverse center of the said members whereby upon tightening the strap the tendency is to lift the outer edges of the members and press the inner edges closely against the person.

3. A swimming appliance such as described in claim 1, including also a fastening for uniting the front ends of the buoyant members, located in advance of the chin strap.

4. A swimming appliance such as described in claim 1, where the connection serving as the chin strap is adjustable as to its length between the buoyant members.

5. A swimming appliance, comprising a pair of buoyant members, a flexible connection uniting the back ends of such members, a band adapted to go about the neck of a wearer to which the said flexible connection is secured, a cross band connecting the front portions of the buoyant members, and body straps connected, respectively, with the outer edges of the buoynt members approximately in line with the said cross band.

PAUL J. TIMBERLAKE.