

(No Model.)

2 Sheets—Sheet 1.

R. WIGHTMAN, Jr.  
BUOYANT BATHING SUIT.

No. 454,193.

Patented June 16, 1891.

Fig. 1.

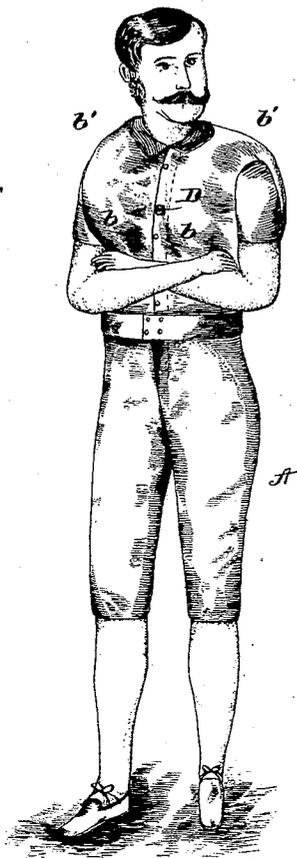


Fig. 2.

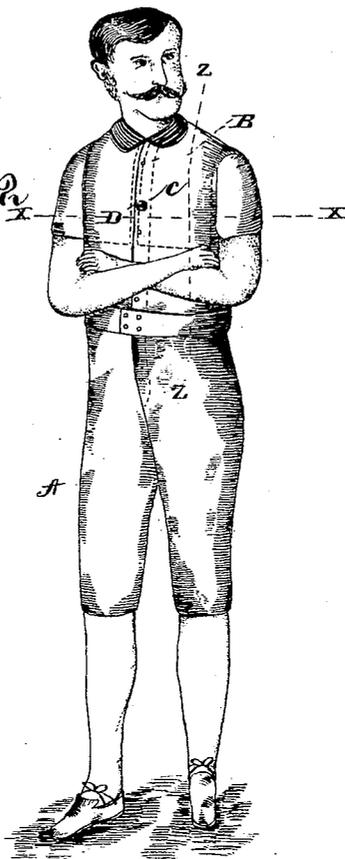
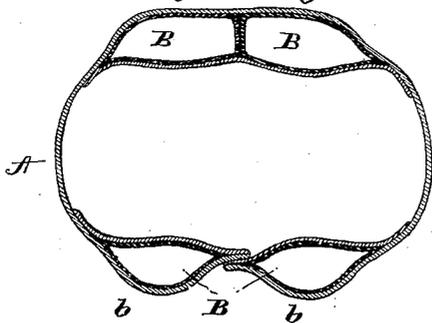


Fig. 4.



Witnesses

John Innis  
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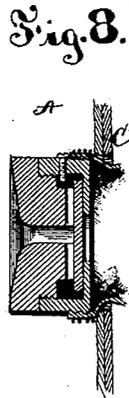
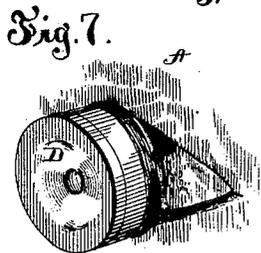
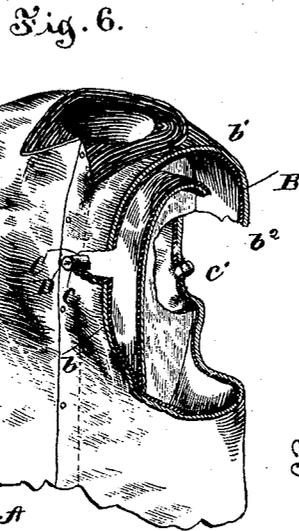
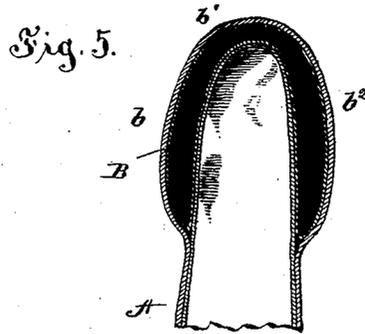
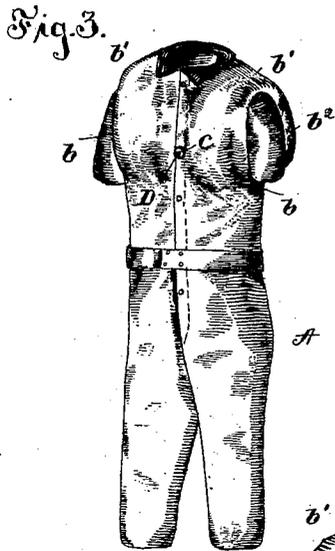
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Witnesses

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# UNITED STATES PATENT OFFICE.

RICHARD WIGHTMAN, JR., OF NEW YORK, N. Y.

## BUOYANT BATHING-SUIT.

SPECIFICATION forming part of Letters Patent No. 454,193, dated June 16, 1891.

Application filed July 9, 1890. Serial No. 358,176. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD WIGHTMAN, JR., a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Buoyant Bathing-Suits; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to wearing-apparel of the class known as "buoyant bathing-suits;" and it has for its object to provide a simple and improved bathing-suit of this class which will effectually prevent the wearer from sinking when immersed in water and which will possess especial advantages in point of simplicity and inexpensiveness in manufacture, facility and convenience in use, and durability and general efficiency.

To this end my invention consists, substantially, in an improved bathing garment or suit provided with rubber or elastic air-tight chambers permanently inserted in the body or waist portion of the garment, or at other suitable or desired points, and provided with suitable means or devices projecting from the said air-tight chambers inserted in the garment by which the said chambers may be readily and conveniently inflated, so that the improved garment will operate to efficiently and effectually retain the wearer safely above the surface of the water; and it further consists in certain details of construction, arrangement, and operation, all substantially as herein shown and described, and particularly pointed out in the claims.

It will be noted that my invention is particularly adapted for use as a buoyant bathing-suit for general use by novices or swimmers in surf and other bathing, to constantly retain the wearer properly above the surface of the water and thus enhance the pleasure and benefit of the exercise and avoid the fatigue incident to the constant efforts otherwise necessary to keep the position above the surface, to effect which it is only necessary to inflate the suit before it is put on or adjusted in position; but, aside from general

use as a safety swimming garment, it is obvious that my invention is adapted for efficient and effectual operation as a life-preserver, or in case of accident or emergency.

In the drawings, Figure 1 is a perspective view showing my improved buoyant bathing-suit in position upon the wearer. Fig. 2 is a perspective view illustrating the suit when the air-chambers are uninflated. Fig. 3 is a similar view showing the suit inflated and ready for adjustment and use. Fig. 4 is a transverse sectional view. Fig. 5 is a corresponding view taken on another plane. Fig. 6 is a detail sectional perspective view. Fig. 7 is a detail perspective view illustrating the projecting inflation means or devices. Fig. 8 is a detail sectional view of the latter.

Corresponding parts in all the views are denoted by the same letters of reference.

Referring to the drawings, A designates the buoyant bathing-suit, which may be, in the main, of any suitable or adapted pattern and construction, such as is generally preferred and used by persons of any age and either sex, and formed of woolen, cotton, silk, or any other suitable or desired fabric, according to the style and quality of the garment and its adaptability for men's, women's, or children's wear.

In the body or waist portion of the garment A, above the belt in the front and back, are inserted air-tight chambers B B, these chambers being permanently inserted and retained within the garment, as shown. The chambers B B are preferably formed of rubber; but they may be constructed of any suitable or adapted elastic material. By inserting the air-tight chambers in the garment in the manner described and shown the buoyant chambers are securely retained in their normal or desired position, and all inconvenience or risk attending the adjustment or securing of the buoyant chambers or liability to displacement is entirely obviated, no further operation or attention being required of the wearer than simply to inflate the chambers through the medium of the projecting inflation device whenever desired.

The air-chambers may be of any adapted or desired shape or contour, but are prefer-

ably constructed and arranged, as shown in the accompanying drawings, in approximately flat and extended form, conforming to the general shape and contour of the garment at the point or portion in which the chambers are inserted. By this construction and arrangement the air-tight chambers are located and extend across the chest or bust and shoulder portion of the suit and across the back, as shown, respectively, at *b*, *b'*, *b''*, and *b'''*, the location of the chambered or buoyant portion of the garment being thus at the front and back and over or across the shoulders.

In lieu of forming separate chambers B B, it will be understood that the garment may have inserted in it a single chamber of proper shape and suitably located, the chamber being divided by partitions into separate air-tight chambers or compartments, or, if desired, these partitions may be entirely omitted, thus forming a single air-tight chamber extending across the front and back and over the shoulders, or otherwise located, as desired; but the construction embodying separate chambers or compartments or separate air-tight chambers B B, as herein shown, is preferred, for the reason that by this improved construction and arrangement if one of the chambers or compartments should become accidentally injured or punctured the office of the garment or suit would not be materially impaired and the remaining air-tight chamber or chambers would effectually perform the office of the suit and prevent the wearer from sinking below the surface.

The air-tight chambers B B are provided with a small inflation-tube C, projecting therefrom and provided at the end with a valve or stopper D. This valve is adapted to securely close the end of the tube after the chambers have been inflated, and is preferably a screw-valve of substantially the ordinary construction used in air-cushions of various kinds. The tube projects from the air-tight chamber at a suitable point, and is extended or carried to the outside of the garment, the preferred construction being as shown in the accompanying drawings, in which the outer end of the tube projects to the center of the garment at the chest or bust, as shown at *c*, a suitable orifice or opening being formed in the fabric of the garment at this point for the reception and retention of the end of the tube, and the screw cap or valve being provided upon this outer projecting end of the tube.

In the construction of my improved buoyant bathing-suit I prefer to employ a single main tube extending to the different or independent air-tight chambers B B; but it will be understood that in carrying out my invention suitable branches running from the main tube to the independent air chambers or compartments may be employed, or in lieu thereof a separate tube may be arranged

to project from each independent air-tight chamber; but the construction embodying a single main tube is preferred, for the reason that the inflation-tubes are thus concentrated and brought to one main opening, having the screw valve or cap. It will be understood that by means of the construction and arrangement of projecting tubes herein shown and described any one or all of the air-chambers inserted in the suit or garment may be inflated at will by the user or wearer.

As shown in the drawings, the construction embodying the two air-tight chambers B B across the bust and back of the garment may be provided with a corresponding projecting tube and closing valve or cap centrally located at the back for the inflation of the back chamber, as shown at *c'*.

The advantages and operation of my improved buoyant bathing-suit will be readily understood by those skilled in the art to which it appertains and will be apparent to the ordinary wearer.

In the use of the suit the wearer has simply to inflate the inserted air-tight chambers through the medium of the projecting tube and securely fasten the screw valve or cap, when the suit may be adjusted and worn with entire safety from all liability of accident or inconvenience from sinking below the surface of the water.

The construction and arrangement of air-tight chambers as illustrated and described is particularly adapted to effectually remove all liability to accident and under all circumstances prevent the wearer from sinking below the surface of the water when immersed.

My invention is susceptible to numerous manifest modifications, and I do not, therefore, wish to be understood as limiting myself to the exact construction and arrangement of parts herein shown and described, but reserve the right to all such variations and modifications as properly fall within the spirit and scope of my invention and the following claims.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A buoyant bathing-suit jacket comprising front and back air-compartments terminating in front flaps, which divide the front compartments into two parts, said flaps being supplied with fastening devices and adapted to be overlapped when secured, whereby the jacket may be removed and applied as a coat, substantially as described.

2. A buoyant bathing-suit jacket comprising back and rear air-compartments and front divided compartments, together with short sleeves having shoulder air-compartments terminating above the lower edge of the said sleeves, and devices for inflating said compartments, said jacket being adapted to be attached to the pantaloons, which are non-inflatable, substantially as described.

3. A buoyant bathing-suit jacket having waistband, short sleeves, and front and back air-compartments, said front compartments being divided centrally by suitable fastening-strips, and said short sleeves at the shoulder portions being provided with air-compartments above the lower edges thereof, said jacket being connectible to pantaloons

which are non-inflatable, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD WIGHTMAN, JR.

Witnesses:

D. C. THOMAS,

GEO. J. KLUEPFEL.