

C. A. SMACK.
LIFE RING.
APPLICATION FILED JUNE 24, 1911.

1,043,367.

Patented Nov. 5, 1912.

2 SHEETS-SHEET 1.

Fig. 1.

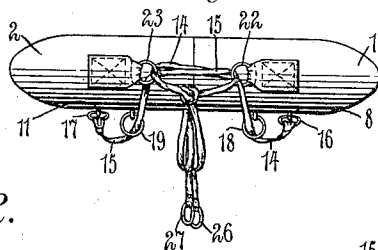


Fig. 2.

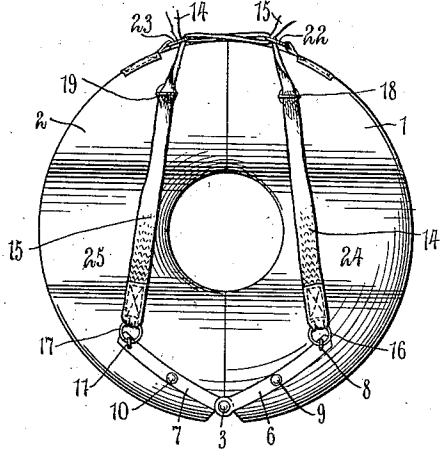


Fig. 3.

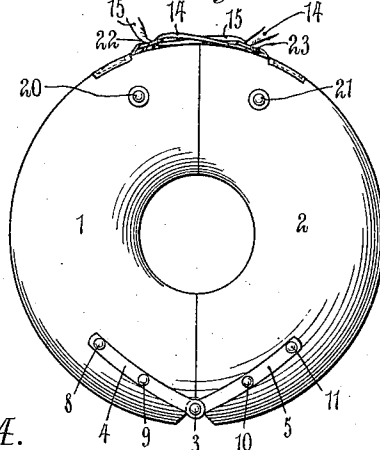
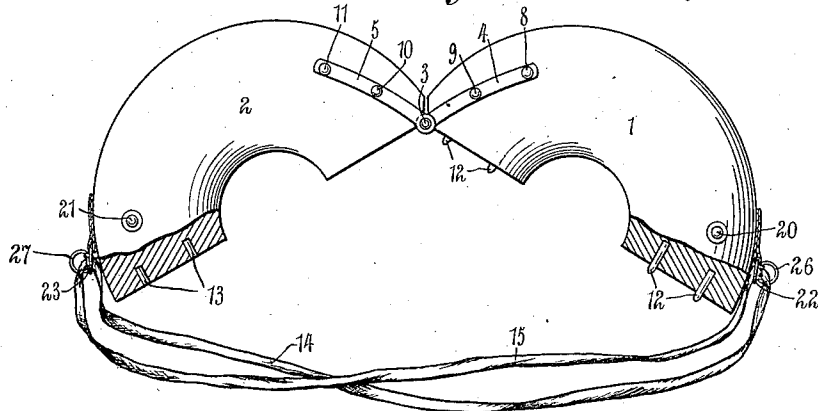


Fig. 4.



Witnesses:
Harry J. Fleischer
J. George Barry

Inventor:
Cyril A. Smack
by his attorney
M. W. Woodward

C. A. SMACK.
LIFE RING.
APPLICATION FILED JUNE 24, 1911.

1,043,367.

Patented Nov. 5, 1912.

2 SHEETS—SHEET 2.

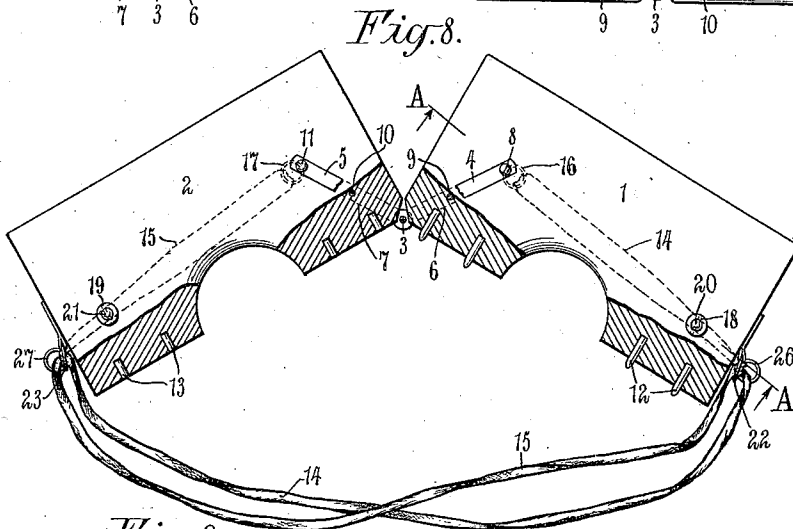
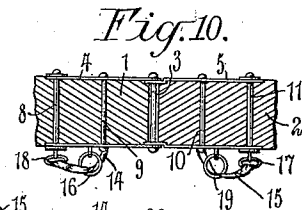
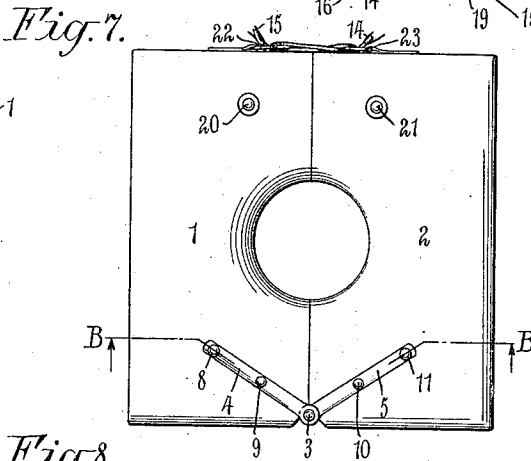
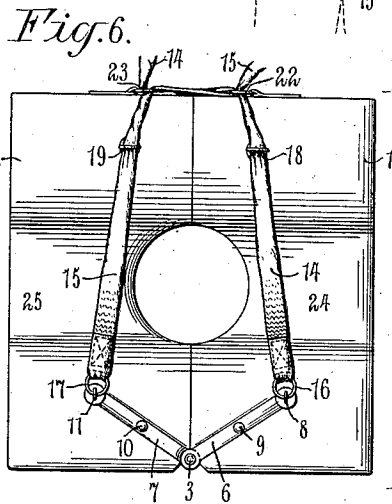
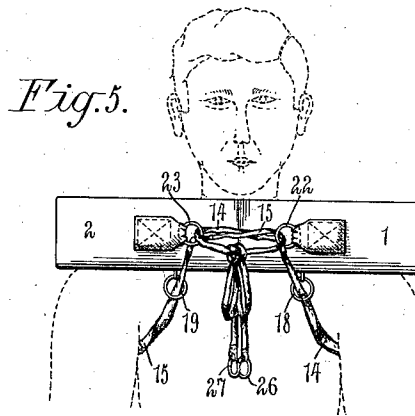
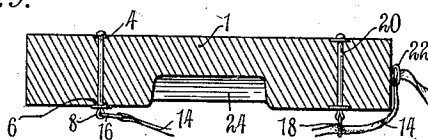


Fig. 9.



Witnesses:
Harry G. Fleischer
J. George Barry

Inventor:
Cecil A. Smack
by his attorney
Morrison & Ward

UNITED STATES PATENT OFFICE.

CYRIL A. SMACK, OF LONG BRANCH, NEW JERSEY.

LIFE-RING.

1,043,367.

Specification of Letters Patent.

Patented Nov. 5, 1912.

Application filed June 24, 1911. Serial No. 635,155.

To all whom it may concern:

Be it known that I, CYRIL A. SMACK, a citizen of the United States, and resident of Long Branch, in the county of Monmouth and State of New Jersey, have invented a new and useful Improvement in Life-Rings, of which the following is a specification.

My invention consists in certain improvements in life rings of that type which are applied around the neck of the wearer and secured in position on the shoulders against displacement by under arm straps, the disposal of the buoyant material being such that the head of the wearer is held well above the surface of the water when the ring is in use.

My invention comprises a life ring divided into two rigid half sections hinged together and having under arm straps for use in securing the half sections of the ring together around the neck of the wearer and for holding the ring snugly down onto the shoulders of the wearer.

My invention also comprises certain improvements in the life ring whereby the same is materially strengthened and in which the strain upon the ring due to the supporting of the weight of the wearer by the under arm straps is taken upon the top of the life ring rather than upon the bottom of the same.

Practical embodiments of my invention are represented in the accompanying drawings, in which—

Figure 1 represents in front elevation one form of the life ring in its closed position, Fig. 2 is an inverted plan view of the same, Fig. 3 is a top plan view with the ring in its closed position, Fig. 4 is a top plan view partially in section with the ring in its open position, Fig. 5 represents another form of the life ring in front elevation in position for use, Fig. 6 is an inverted plan view of the same, Fig. 7 is a top plan view with the ring closed, Fig. 8 is a top plan view partially in section with the ring open, Fig. 9 is a section taken in the plane of the line A—A of Fig. 8, and Fig. 10 is a detail section taken in the plane of the line B—B of Fig. 7.

The ring is shown circular in form in Figs. 1 to 4 inclusive and rectangular in form in Figs. 5 to 10 inclusive. In other respects the two forms are quite similar. The ring comprises two rigid half sections 1 and 2 composed of some buoyant material,

preferably balsa wood, which half sections are hinged together at 3. The top straps of the two hinged members are denoted by 4, 5, and the bottom straps by 6, 7, which straps are secured to the half sections 1 and 2 and to each other to form a rigid hinge as, for instance, by rivet bolts 8, 9, 10, 11.

Means are provided for holding the free ends of the half sections 1 and 2 against lateral displacement when the ring is closed, which means, in the present instance, comprises one or more dowels 12 carried by the half section 1 and arranged to enter one or more sockets 13 in the half section 2. A common means is provided for closing the ring, holding it closed and for holding the ring snugly in position on the shoulders of the wearer, which means comprises two under arm straps 14, 15, secured to rings 16, 17, at the ends of the bolts 8 and 11 on the under sides of the half sections 1 and 2. These under arm straps 14, 15, extend forwardly beneath the life ring and pass through retaining rings 18, 19, at the ends of rivet bolts 20, 21, which bolts extend through to the top of the life ring. From these rings 18, 19, the straps 14, 15, lead through rings 22, 23, on the periphery of the life ring and from thence the strap 14 leads from the ring 22 through the ring 23 while the strap 15 leads from the ring 23 through the ring 22 so as to obtain a cinch hold on the ring sufficiently strong to hold the half sections 1 and 2 together and to hold the ring snugly on the shoulders of the wearer. To permit this to be done, the free ends of the straps 14, 15, are drawn as tightly as can be without discomfort to the wearer and then tied together.

To obtain a great amount of buoyancy without raising the life ring too far above the shoulders, the under side of the life ring is built up to a greater thickness at the front and back thereof than at the transverse intermediate portion thus leaving recesses 24, 25, in the bottom of the life ring for receiving the shoulders of the wearer. Rings 26, 27, are provided at the free ends of the under arm straps 14, 15, for preventing the straps from running through the rings 22, 23, and thus requiring relacing the straps. By extending the bolts which carry the rings 16, 17, 18, 19, through from the bottom of the life ring to the top thereof, the great strain upon the ring due to the suspension of the wearer by the under arm straps 14,

15, is extended to the top of the life ring thus obviating any tendency on the part of the rings from being pulled off from the bottom of the life ring where they were
 5 formerly attached. Furthermore, by extending the straps of the hinge members along the top and bottom of the life ring and passing the bolts 8 and 11, which carry
 10 the rings 16, 17, through said straps, an additional strengthening of the life ring is accomplished.

The features above enumerated all go to perfect the life ring.

It is evident that slight changes might be
 15 resorted to in the form, construction and arrangement of the several parts without departing from the spirit and scope of my invention; hence I do not wish to limit myself strictly to the structure herein set forth, but

20 What I claim is:—

1. A neck life ring comprising two rigid half sections hinged together, under arm
 25 straps, devices carried by the ring and engaging the under arm straps, said under arm straps being arranged to draw the two ring sections together around the neck of the wearer and snugly down onto the shoulders of the wearer and hold the ring in such
 30 position, when secured, said connecting devices for the straps passing through the ring from the bottom to the top thereof for transmitting the strain on the straps due

to the weight of the wearer, to the top of the ring.

2. A neck life ring composed of half sections hinged together and means for securing the half sections in their closed position, the bottom of the life ring at its front and back being reinforced with buoyant material thereby leaving transverse recesses for
 40 the reception of the shoulders of the wearer.

3. A neck life ring composed of half sections hinged together and a common device for securing the half sections in their closed position and for holding the life ring
 45 snugly in position on the shoulders of the wearer, the bottom of the life ring being recessed transversely for receiving the said shoulders.

4. A life ring comprising two members
 50 hinged together, the straps of the hinge being extended a considerable distance along the upper and lower portions of the ring and bolts passing through the ring and straps for securing the straps in position on
 55 the ring.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two witnesses, this twenty-second day of June, 1911.

CYRIL A. SMACK.

Witnesses:

F. GEORGE BARRY,
 HENRY C. THIEME.