

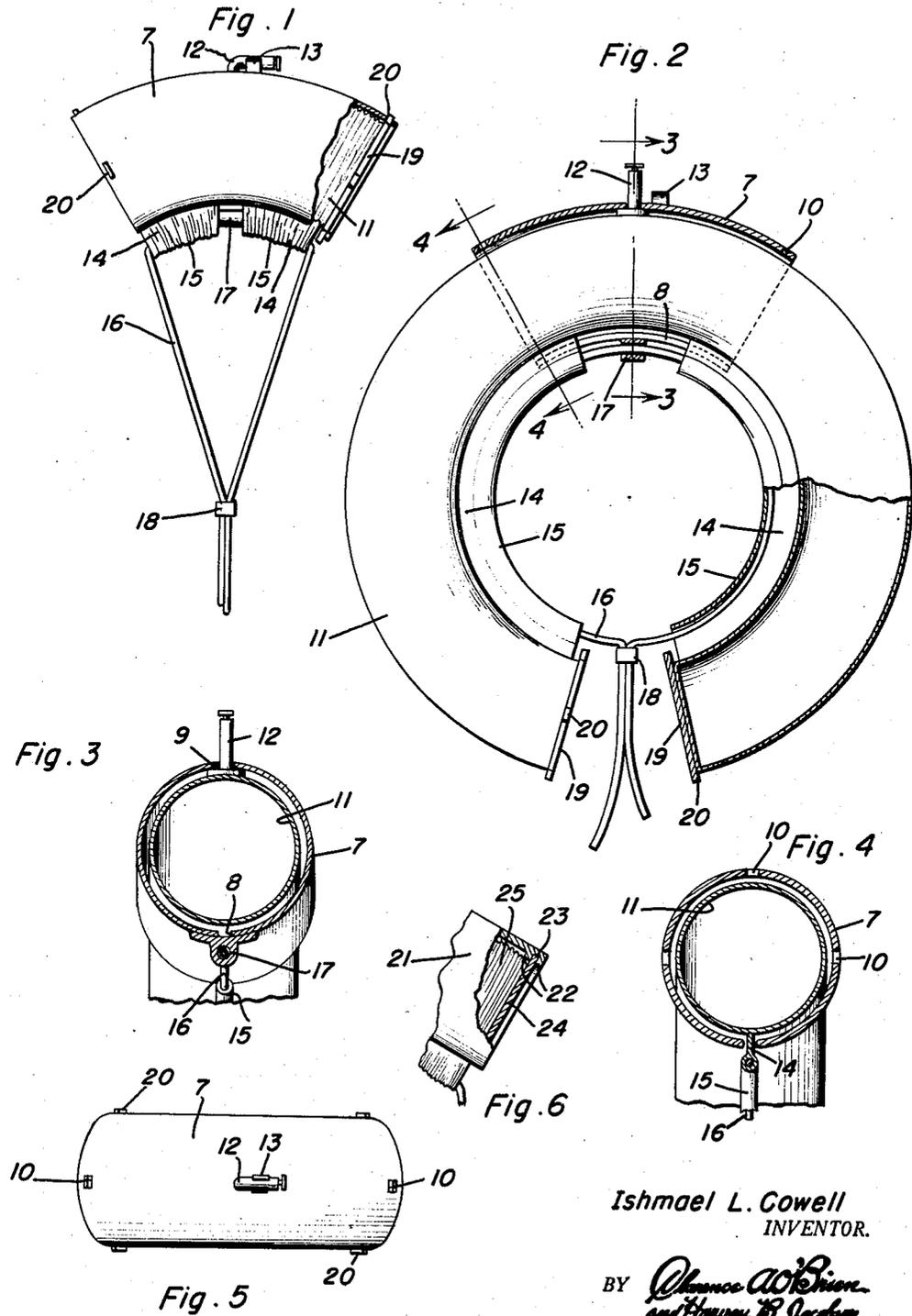
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COLLAPSIBLE LIFE PRESERVER

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## COLLAPSIBLE LIFE PRESERVER

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4 Claims. (Cl. 9—17)

The present invention relates to new and useful improvements in inflatable life preservers to be worn around the neck and as for one of its important objects to provide, in a manner as hereinafter set forth, a device of this character which, when not in use and collapsed, will occupy a minimum of space.

Another important object of the invention is to provide, in a life preserver of the aforementioned character, comprising an inflatable neck yoke, novel means for housing said yoke when it is collapsed.

Other objects of the invention are to provide a collapsible life preserver of the character described which will be comparatively simple in construction, strong, durable, reliable, of light weight, comfortable and which may be manufactured at low cost.

These, together with other objects and advantages which will become subsequently apparent, reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a view principally in side elevation of a life preserver constructed in accordance with the present invention showing the device collapsed with one end portion broken away in section;

Figure 2 is a view in side elevation with portions in section, showing the device inflated;

Figure 3 is a cross-sectional view taken substantially on the line 3—3 of Figure 2;

Figure 4 is a cross-sectional view taken substantially on the line 4—4 of Figure 2;

Figure 5 is a top plan view of the device; and

Figure 6 is a fragmentary view, partially in section, showing a modification.

Referring now to the drawing in detail, it will be seen that reference character 7 designates a longitudinally curved sleeve of circular cross-section. The sleeve 7, which may be of any desired dimensions and material, has formed longitudinally in its lower portion a slot 8 which extends from end to end thereof. The upper portion of the sleeve 7 is provided with an opening 9. The end portions of the sleeve 7 are provided with circumferentially spaced openings 10, the purpose of which will be presently set forth. The sleeve 7 is open at its ends.

Mounted in the sleeve 7 is an inflatable neck yoke 11 of rubber or other suitable material. The neck yoke 11 is provided at an intermediate point with an inflating valve 12 which projects through the opening 9. The inflating valve 12 is resilient or bendable and, when not in use, is secured by a clip or the like 13 to the sleeve 7.

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The neck yoke 11 is provided on its inner circumference or periphery with integral flanges 14 having formed thereon tubular beads 15. A drawstring 16 is threaded through the beads 15, said drawstring passing through a holder 17 on the sleeve 7 which bridges the slot 8 at an intermediate point. The end portions of the drawstring 16 are adjustably connected by a slide 18.

Mounted on the ends of the collapsible neck yoke 11 are flexible discs or circular plates 19. The discs 19 are provided with peripheral lugs or projections 20 which are engageable in the openings 10 in the end portions of the sleeve 7.

It is thought that the use of the device will be readily apparent from a consideration of the foregoing. Briefly, when the neck yoke 11 is deflated, said neck yoke in its collapsed condition is confined in the sleeve 7. The slot 8 in the sleeve 7 accommodates the elements 14 and 15 of the collapsed neck yoke 11. The flexible discs 19 confine the yoke 11 to the sleeve 7, said discs being inserted in the end portions of said sleeve with the lugs or ears 20 engaged in the openings 10. When the preserver is to be used, the valve 12 is released from the retaining clip 13 and the neck yoke 11 is inflated. When air is thus forced into the yoke 11, the flexible retaining discs 19 are ejected from the end portions of the sleeve 7 and said yoke, as it is inflated, assumes the shape shown to advantage in Figure 2 of the drawing. The arcuate sleeve 7 encircles the front of the neck below the chin and the inflated yoke 11, of course, extends around the neck. Through the medium of the drawstring 16, the yoke 11 may be readily adjusted for the correct fit and comfort.

In the embodiment of Figure 6 of the drawing, reference character 21 designates an arcuate sleeve having in each of its open end portions a pair of circumferential ribs 22 defining channels or grooves 23. The grooves 23 are for the reception of the peripheral portions of flexible discs 24 which are mounted on the ends of an inflatable neck yoke 25. In other respects, this embodiment of the invention is substantially similar to the embodiment of Figures 1 to 5, inclusive, of the drawing.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A life preserver of the character described comprising: an inflatable, collapsible neck yoke, an arcuate sleeve mounted on the yoke at an intermediate point and enclosing said yoke when in a collapsed condition, and means for releasably securing the yoke in the sleeve releasing said yoke in response to inflation of the yoke.

2. A life preserver of the character described comprising: an inflatable, collapsible neck yoke, an arcuate sleeve mounted on the yoke at an intermediate point and enclosing said yoke when in a collapsed condition, and means for releasably securing the yoke in the sleeve, said sleeve having openings in its end portions, said means including flexible discs mounted on the ends of the yoke, and

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lugs projecting from said discs and engageable in the openings.

3. A life preserver of the character described comprising: an inflatable, collapsible neck yoke, an arcuate sleeve mounted on an intermediate portion of the yoke and enclosing same when in a collapsed condition, a tubular bead on the inner circumference of the yoke, a drawstring in said bead for adjusting the yoke when inflated, said sleeve having a longitudinal slot therein accommodating the bead, and means for releasably securing the collapsed yoke in the sleeve.

4. A life preserver of the character described com-

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prising: an inflatable, collapsible neck yoke, an arcuate sleeve mounted on the yoke at an intermediate point and enclosing said yoke when in a collapsed condition, and means for releasably securing the yoke in the sleeve, said sleeve having circumferential channels in its end portions, said means including flexible discs on the ends of the yoke engageable in the channels.

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