Dec. 12, 1933. J. ROBERTSON 1,938,610

LIFE PRESERVER

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Fig. 1.

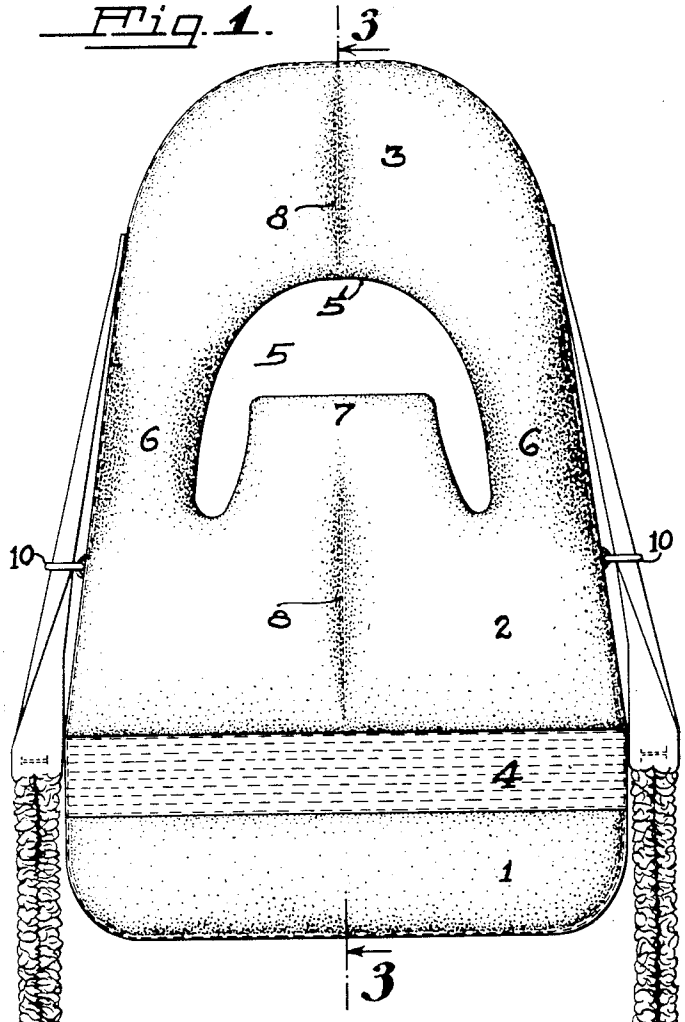

Fig. 2.

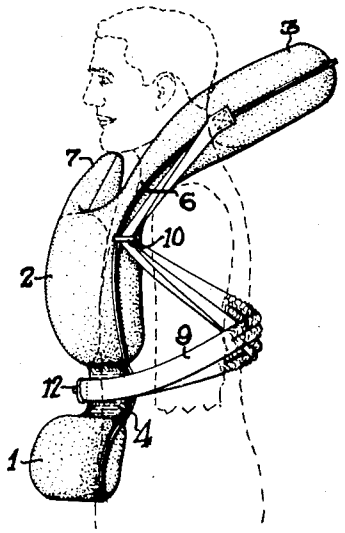

Fig. 3.

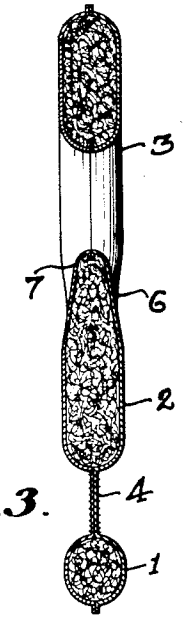

Fig. 4.

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LIFE PRESERVER

James Robertson, San Francisco, Calif.

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8 Claims. (Cl. 9—17)

This invention relates to improvements in life preservers.

An object of my invention is to provide an improved life preserver which is adapted to support the wearer in a position with his head well above the surface of the water.

Another object of my invention is to provide an improved life preserver having the buoyant material therein so disposed as to automatically cause the wearer's body to assume a rearwardly inclined position in which the head is supported well above the surface of the water.

A further object of my invention is to provide an improved life preserver having a chin rest which prevents the wearer's head from dropping forwardly even though consciousness might be lost from exposure or through other causes.

A still further object of my invention is to provide an improved life preserver adapted to fit persons of different sizes, having the buoyant material therein so arranged as to automatically cause a person wearing the same to assume a position with his face disposed in an upward direction and well above the surface of the water.

Other objects more or less apparent will present themselves or will be specifically pointed out in the description to follow.

In the accompanying drawing:

Fig. 1 is a plan view of a life preserver constructed in accordance with my invention;

Fig. 2 is a side view showing my invention secured upon a wearer;

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1; and

Fig. 4 shows a portion of one of the spring contained securing straps, the outer covering thereof being partly broken away and in section.

In constructing my improved life preserver I preferably cut two layers of canvas or other suitable fabric into the desired shape and size and place suitable quantities of kapok or other buoyant material between the layers before sewing their edges together. The device is comprised of three main buoyant compartments 1, 2 and 3, the compartment 1 being disposed at the lower end, the middle compartment 2 being connected to compartment 1 by a flexible strip 4, and the compartment 3 being disposed at the opposite or upper end. An inverted U-shaped opening 5 is formed between the compartments 2 and 3, the said opening having a rounded top end 5' which extends into the compartment 3. The compartments 2 and 3 are joined together by narrowed kapok filled shoulder portions 6, which, by reason of their comparative narrowness, are somewhat flexible. Extending upwardly from the upper end of the compartment 2 and disposed between the shoulder portions 6 is a protruding member or chin rest 7 which is adapted to extend under the chin of a wearer and thereby prevent his head from dropping downwardly. In order to automatically position the body of the wearer with his face upward and lifted well out of the water, I have distributed the buoyant material in the various compartments in such a manner that compartments 2 and 3 are sufficiently buoyant to effect the desired results. The compartment 2 is normally located on the breast of the wearer with the upwardly protruding member 7 positioned under the chin. The compartment 2 serves to automatically position the body of the wearer so the face is turned upward. The compartment 3 is so disposed with reference to the middle compartment that it lies beneath the back of the wearer's head and forms a rest and support therefor. The compartment 3 may be provided with a crease 8 within which the wearer's head normally rests, while the compartment 2 may be provided with a similar crease 8 which permits the side edges of the said compartment to be drawn closer to the breast.

The means employed for securing the device upon a wearer consists of two straps 9 fastened at ends thereof to opposite side edges of compartment 3. The straps extend downwardly through rings 10 secured to opposite side edges of the compartment 2, at points beneath the shoulder portions 6. The straps are each preferably provided therein with one or more coiled springs or other suitable resilient means 11 which enable the device to be secured upon bodies of different sizes. Suitable fastening means 12 provided on the free ends of the straps permit the securing of the said ends together.

A person desiring to use the device first places his head through the inverted U-shaped opening 6, thereby causing the compartment 2 to become positioned on his breast and the compartment 3 back of his head. The straps 9 are crossed at the back of the wearer's body and then brought forward over the flexible strip 4 to a point in the front where they are fastened together. In fastening the straps together a downward pressure is exerted upon the sides of compartment 3, thereby causing the rounded lower edge thereof to firmly contact with the lower part of the wearer's neck. The tension of the springs 11 in the straps not only causes the compartment 3 to be maintained in a secure position against the lower part of the head of the wearer, but also maintains the compartment 2 firmly against the wearer's breast. When the device has been placed in operative position upon a person it is almost impossible to effect its detachment except by unfastening the ends of the straps. The proper functioning of the compartments 2 and 3 in automatically causing a person's body to assume a rearwardly inclined position in the water, is materially assisted by the lower compartment 1 which turns upwardly

upon the strip 4, thereby contributing considerably in turning the person upon his back or into the required position. It is to be observed that the buoyant compartment 2, the buoyant compartment 3, the buoyant shoulder portions 6 and the chin rest 7 are formed integrally with one another, and that they cooperate with one another to support a wearer's body in such a position that his head is maintained above the surface of the water with his face upwardly disposed. The buoyant shoulder portions 6 and the upper compartment 3, which forms the head rest, cooperate with one another to normally maintain the chin rest 7 in such a position that the wearer's head cannot drop forwardly.

Although I have shown and described a life preserver construction constituting the preferred embodiment of my invention, still, it is recognized that the principles thereof may also be embodied in other forms or shapes having considerable merit. For this and other apparent reasons, I desire my invention included broadly within the spirit of the appended claims rather than limited to the exact construction herein shown and described.

Having described my invention what I claim is:

1. A life preserver comprising an upper buoyant compartment normally positioned beneath the head of the wearer and a lower buoyant compartment normally located against the wearer's breast, the said compartments being joined together by semi-flexible and buoyant shoulder members, the said comparments and shoulder members being formed integrally with one another and so disposed with respect to one another that an opening is formed for the insertion of the head of the wearer, a protuberance extending into the said opening from the upper edge of the lower compartment, upon which protuberance the wearer's chin normally rests, and means for securing the device upon a wearer.

2. A life preserver comprising an upper buoyant compartment normally positioned beneath the wearer's head and a lower buoyant compartment normally positioned against the wearer's breast, the said compartments being joined together by semi-flexible buoyant shoulder members, and the said compartments and shoulder members being disposed in such a manner that an opening is formed for the insertion of the head of the wearer, a chin rest extending upwardly into the said opening from the top edge of the lower compartment, and means for securing the device upon a person which includes a plurality of flexible straps extending downwardly from opposite side edges of the upper compartment through a plurality of rings secured to opposite side edges of the lower compartment.

3. A life preserver comprising an upper buoyant compartment and a lower buoyant compartment joined together by buoyant shoulder members, the lower buoyant compartment being normally positioned against the breast of the wearer and the upper buoyant compartment being normally positioned beneath the head of the wearer, the said compartments and shoulder members being integrally joined together in such a manner that an opening is provided for the insertion of the head of a wearer, a chin rest formed integrally with the lower compartment and extending into the said opening, and means for securing the device upon a person.

4. A life preserver comprising an upper buoyant compartment and a lower buoyant compartment joined together by buoyant shoulder members, the said compartments and shoulder members being integrally joined together in such a manner that an opening is formed for the insertion of the head of the wearer, and means for securing the device upon a wearer which includes a plurality of flexible straps extending downwardly from opposite side edges of the upper compartment and through loops located at opposite side edges of the lower compartment, the said straps being adapted to be crossed at the back of the wearer's body and to be fastened together at their free ends at the front of the device.

5. In a life preserver, a buoyant one piece float comprising breast, shoulder and head supporting portions formed integrally with one another and so disposed with respect to one another than an opening is formed for the insertion of the head of the wearer, the said breast portion being provided with a protuberance extending into the said opening.

6. In a life preserver, a buoyant one piece float formed and shaped so as to provide a head supporting portion, a breast portion normally positioned against the breast of the wearer, a plurality of spaced shoulder portions joining the head supporting and breast portions, and a chin rest portion projecting from the breast portion at points between the shoulder portions.

7. A life preserver comprising an upper buoyant compartment normally forming a headrest disposed in an upwardly inclined position behind the head of the wearer and a lower buoyant compartment normally positioned against the wearer's breast, the said compartments being joined together by semi-flexible shoulder members normally a continuation of and aligned with said upwardly inclined headrest, the said compartments and shoulder members being disposed in such a manner that an opening is formed for the insertion of the head of the wearer, and means for securing the device in position on the wearer which includes a plurality of straps extending downwardly from opposite side edges of the upper compartment over the shoulders of the wearer and through a plurality of loops secured to opposite side edges of the lower compartment.

8. In a life preserver, a unitary buoyant float comprising a buoyant breast portion normally positioned against the breast of a wearer, a buoyant head supporting portion normally disposed in an upwardly inclined position behind the head of the wearer and semi-flexible buoyant shoulder portions normally positioned upon the shoulders of the wearer and being a continuation of and in alignment with said buoyant head supporting portion, the said shoulder portions being formed integrally with the said breast and head supporting portions, and means for securing the device in position on the wearer which includes a plurality of straps extending downwardly from opposite side edges of the upper compartment over the shoulders of the wearer and through a plurality of loops secured to opposite side edges of the lower compartment.

JAMES ROBERTSON.