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BUOYANT PROTECTIVE DEVICE FOR BOATS

Filed July 5, 1962

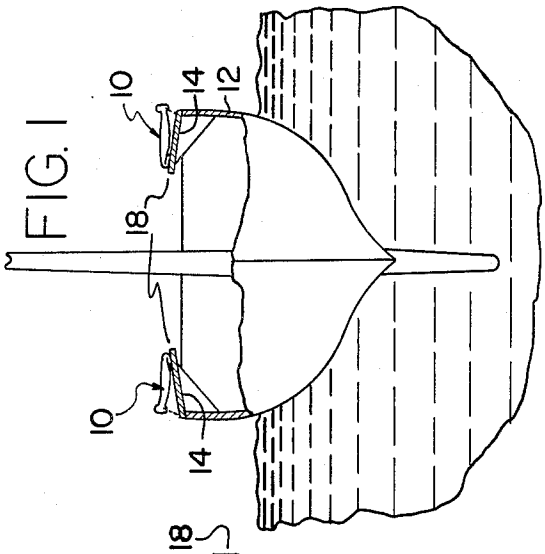


FIG. 1

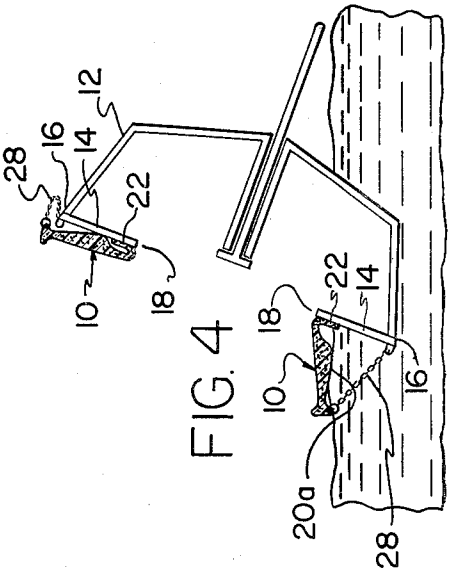


FIG. 4

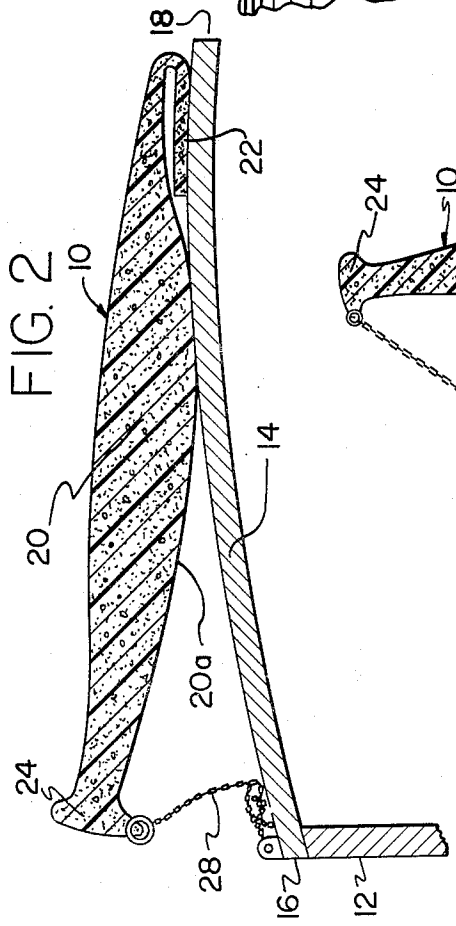


FIG. 2

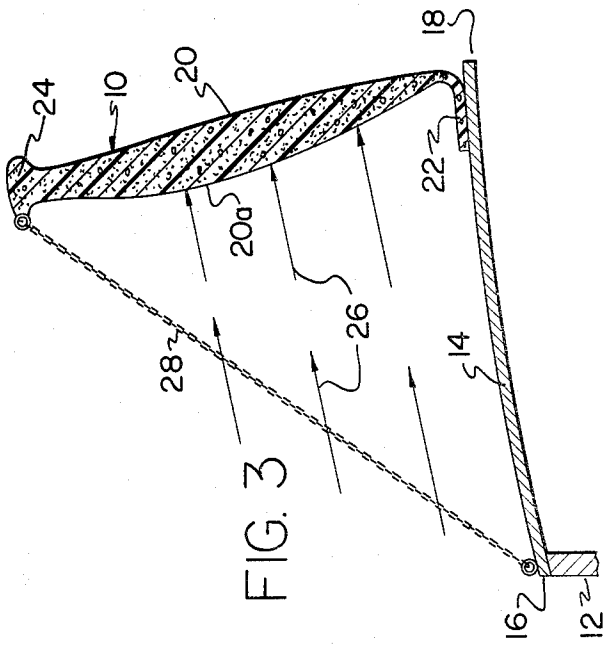


FIG. 3

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BUOYANT PROTECTIVE DEVICE FOR BOATS

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6 Claims. (Cl. 114—121)

The present invention relates to protective devices for boats and more particularly to a protective device for preventing water washing over the gunwale of a vessel from entering into the interior thereof.

An important object of the present invention is to provide a new and improved protective device for vessels including a protective band which normally rests in a position generally to the top or deck of the vessel when there is no danger of water washing over the gunwale and into the vessel but which is automatically raised to a position generally perpendicular to the deck when water starts to flow over the gunwale, thus preventing the water from flowing into the interior of the boat.

Another object of the present invention is to provide a new and improved protective device of the type described which can easily be attached to the top or deck surface of a vessel to provide a simple water-tight seal between the device and the vessel.

Another object of the present invention is to provide a new and improved protective device of the type described which additionally serves to produce a buoyant force for preventing the vessel from capsizing when it is heeled over in the water.

Other objects and advantages of the present invention will become apparent from the following detailed description when taken in conjunction with the drawings, in which:

FIG. 1 is a partial cross-section of a boat or vessel which is fitted with the protective device of the present invention.

FIG. 2 is an enlarged fragmentary cross-section of the protective device of FIG. 1 illustrated in its normal position parallel to the deck surface of the boat.

FIG. 3 is an enlarged fragmentary cross-section similar to FIG. 2 but showing the device in its raised position generally perpendicular to the deck surface.

FIG. 4 is a partial cross-section of a boat or vessel fitted with the protective device of the present invention illustrating the boat in a heeled over position wherein the device is providing a buoyant force for preventing the boat from capsizing.

Referring now to the drawings, there is provided a protective device **10**, constructed in accordance with the features of the present invention, which is attached around the periphery of a boat or vessel **12** or in the case of a vessel having a deck surface **14**, extending inwardly from the gunwale **16**, housing an open cockpit **18**, the protective device **10** is attached to the deck **14** around the perimeter of the cockpit, to prevent the entry of water over the gunwale through the cockpit into the interior of the boat.

The protective device **10** is comprised of a band **20** of floating material, preferably such as a closed cell, cellular rubber or plastic, although other floating materials such as cork or wood, for example, may be used.

The band **20** is of the general cross-section shown in detail in FIG. 2 and is provided with an inner longitudinal edge which is pivotally secured adjacent the cockpit opening **18** with a flexible tongue **22**. The tongue is preferably integrally formed with the band and is constructed of a light, flexible, waterproof material. In the event that wood or cork, etc., is used for the band **20**, the tongue **22** of thin, flexible, waterproof material is attached thereto continually along the inner edge thereof.

The tongue **22** is attached to the decking **14** or the gunwale **16** (where the vessel has no decking) to form a water-tight seal by conventional means such as gluing or by screws placed along the length should it be desired to make the device easily removable from the vessel.

The central portion of the band **20** is considerably thicker than the inner or outer edge portion thereof and provides a cushion for sitting on when the band is in the position shown in FIG. 2. The outer edge of the band **20** is provided with a thickened edge rib **24** which stiffens the band along its length and prevents distortion when under stress due to water pressure engaging the band when it is in the position shown in FIG. 3.

In order to limit the inward pivotal movement of the band **20** as it is forced to the upward position of FIGS. 3 and 4 by the pressure of onrushing water indicated by the arrows **26**, there are provided chains **28** which are secured to the gunwale **16** and the edge rib **24**.

In operation, striking the outer face **20***a* of the band **20**, water flowing over the gunwale **16** forces the band **20** to pivot inwardly until it is restrained by the chains **28** in the position shown in FIG. 3. Thus the water is prevented from entering the cockpit **18** even though it is high enough to flow over the gunwale onto the deck **14**.

Referring to FIG. 4, when the boat or vessel **12** is heeled over as shown, water acting against the surface **20***a* of the band **20** provides a buoyant force **26** tending to right the boat and prevent it from capsizing. In the case of a sailboat where a violent wind causes the boat to heel over, the band **20** operates in the manner of a water-ski or surfboard in providing a righting force which increases as the boat speed increases to help overcome the tendency of the boat to capsize.

While particular embodiments of the invention have been shown, it will be understood, of course, that the invention is not limited thereto since many modifications may be made and it is therefore contemplated by the appended claims to cover any such modification as fall within the true spirit and scope of the invention.

What is claimed and desired to be secured by Letters Patent of the United States is:

1. Apparatus for preventing water flowing over the gunwale of a vessel from entering the interior thereof, comprising a band of floating material extending along said gunwale having a longitudinal edge and a surface adjacent said edge for engaging the water flowing over said gunwale, hinge means extending along the length of said longitudinal edge for pivotally securing said edge of said band along said vessel in water-tight engagement therewith for permitting said band to pivot from an outwardly lying position to an upstanding position in response to the inward flow of water over said gunwale against said surface.

2. Apparatus as defined in claim 1 wherein said hinge means comprises a strip of thin flexible water-proof material integrally formed with said band.

3. Apparatus as defined in claim 1 wherein the band is provided with a substantially thickened central portion.

4. Apparatus as defined in claim 1 wherein said band is provided with a thickened edge rib forming an outer longitudinal edge thereof.

5. Apparatus as defined in claim 4 wherein there is provided means flexibly interconnecting said edge rib and the gunwale of said vessel for limiting the pivotal movement of said band inwardly toward said upstanding position.

6. In combination, a vessel having a top deck surface extending inwardly from the gunwale thereof defining a cockpit opening, a band constructed of floating material positioned to extend along said deck surface adjacent said

cockpit opening, said band having an inner longitudinal edge and a thickened rib forming an outer longitudinal edge and a surface defined between said edges for engaging water flowing inwardly over said gunwale along said top deck surface, longitudinal hinge means pivotally securing the inner edge of said band to said top deck surface along said cockpit opening in water-tight sealing engagement for permitting said band to pivot from an outwardly lying position wherein said surface is contacting said top deck surface to an upstanding position wherein said surface does not contact said top deck surface in response to water flowing over said gunwale inwardly between said surface and top deck surface, and flexible means interconnecting the outer edge of said band to said vessel for limiting the inward pivotal movement of said band to said upstanding position.

References Cited in the file of this patent

UNITED STATES PATENTS

438,917	Goff	Oct. 21, 1890
543,210	Jessup	July 23, 1895

FOREIGN PATENTS

30,967	Norway	Aug. 2, 1920