United States Patent [19]

Ahmer

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[45] **Sept. 25, 1973**

[54] **DRINK CADDY**

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[52] **U.S. Cl.** **248/311,** 211/71

[51] **Int. Cl.** **A47c 7/70**

[58] **Field of Search** 248/311, 304, 305, 248/306, 318, 339, 340, 215, 303; 211/113, 119, 71, 74, 75; 114/188; 24/236, 237

[56] **References Cited**

UNITED STATES PATENTS

2,557,694	6/1951	Sagen	248/318 X
2,409,538	10/1946	Brill et al.	24/236 X
3,587,915	6/1971	Theobald	220/97 C
2,451,923	10/1948	Cox et al.	248/311 X
3,269,683	8/1966	Shinaver	248/311 X
2,346,276	4/1944	Reittinger	248/215
2,893,675	7/1959	Smith et al.	248/311 X
3,194,403	7/1965	Van Horn	248/311 X

FOREIGN PATENTS OR APPLICATIONS

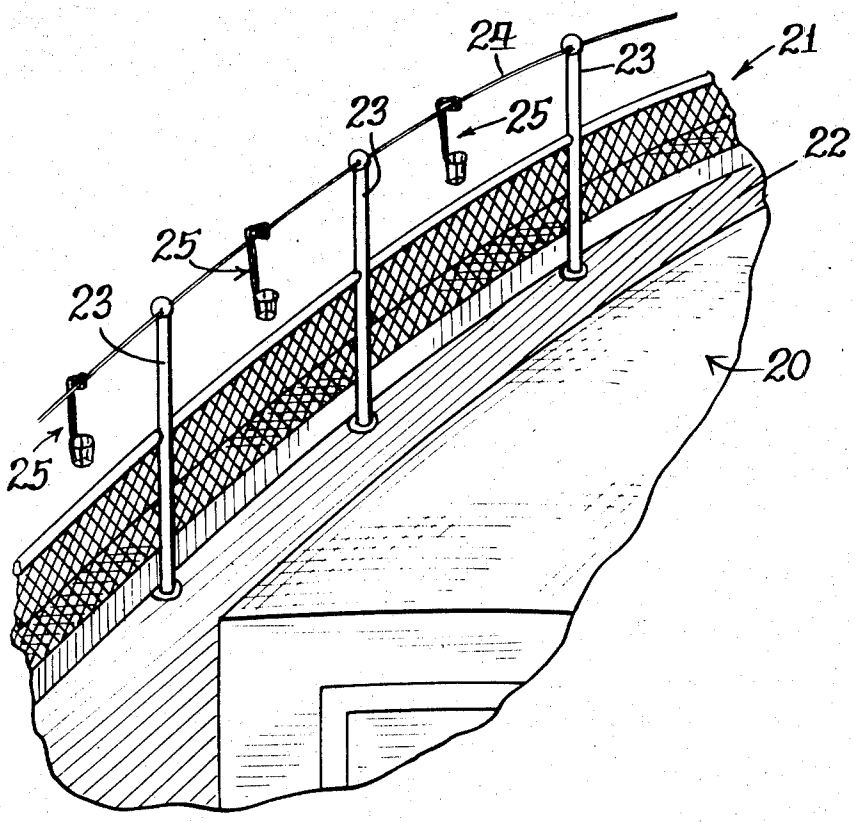
319,304	11/1902	France	248/311

Primary Examiner—J. Franklin Foss
Attorney—James A. Davis et al.

[57] **ABSTRACT**

A portable holding device embodying an open top wire-formed basket coupled to a rigid hanger assembly having detachable connection with the lifeline of a ship or boat to provide substantially universal pivotal support of the basket such that a drinking vessel positioned in the basket is maintained in a generally upright attitude regardless of ship movements.

8 Claims, 9 Drawing Figures



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SHEET 1 OF 2

Fig. 1.

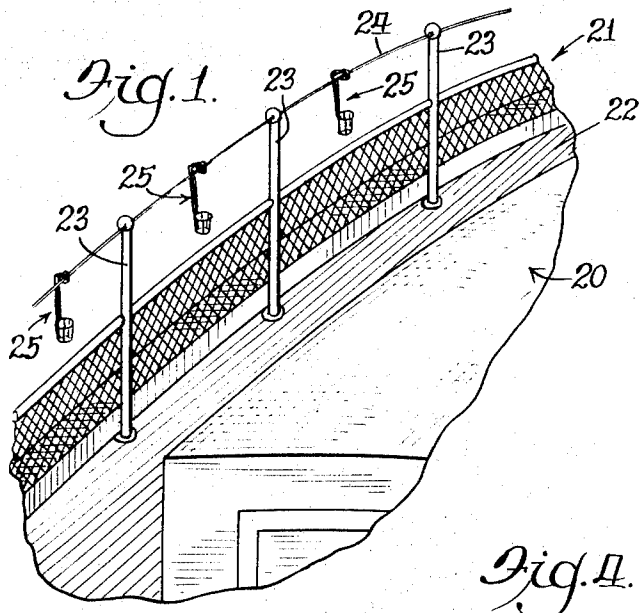


Fig. 2.

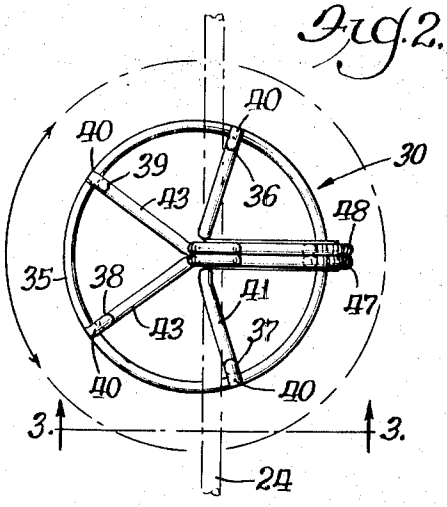


Fig. 4.

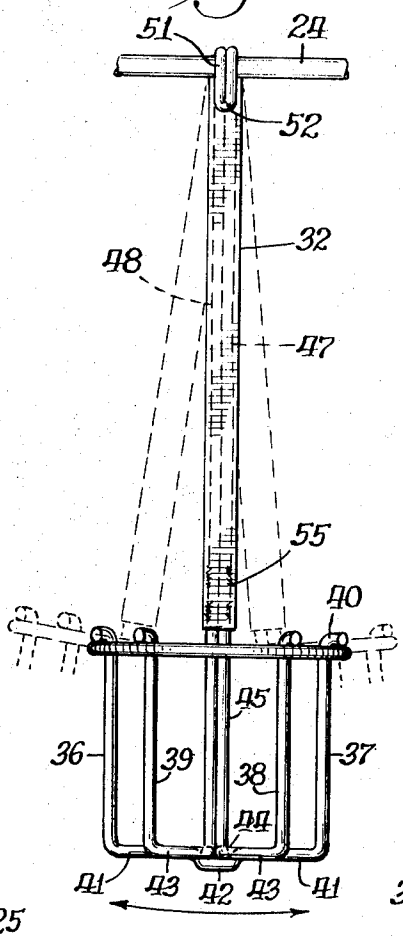


Fig. 3.

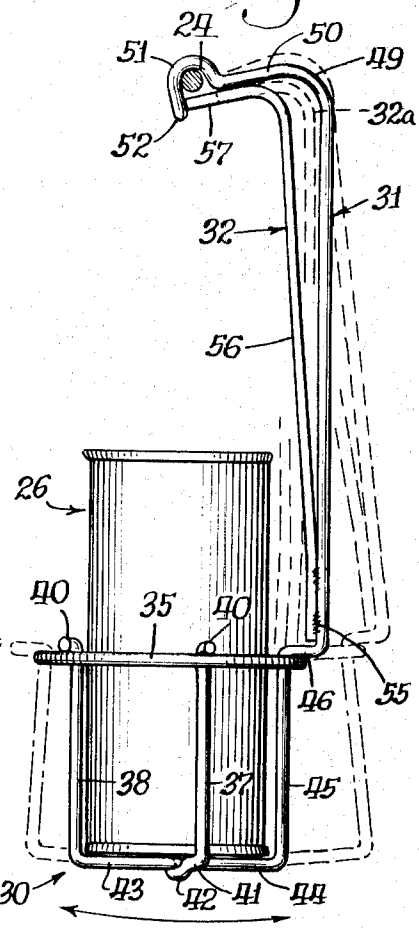


Fig. 5.

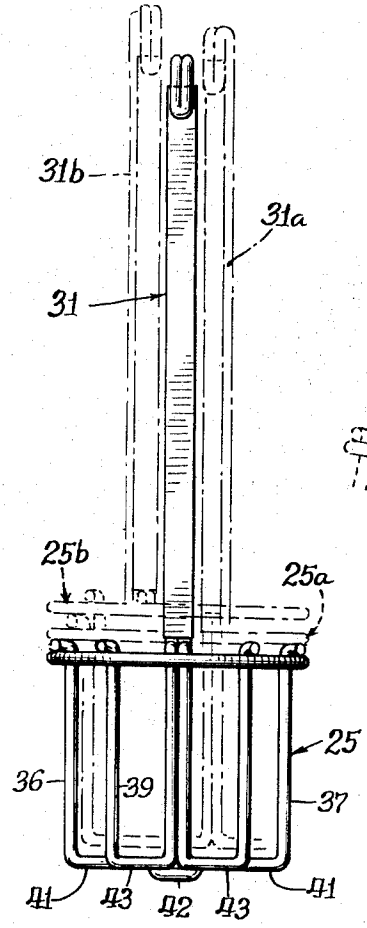


Fig. 8.

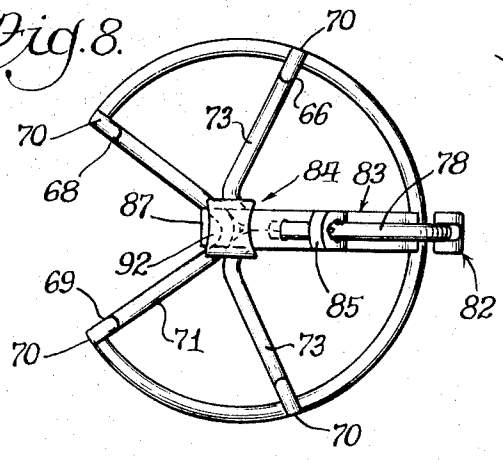
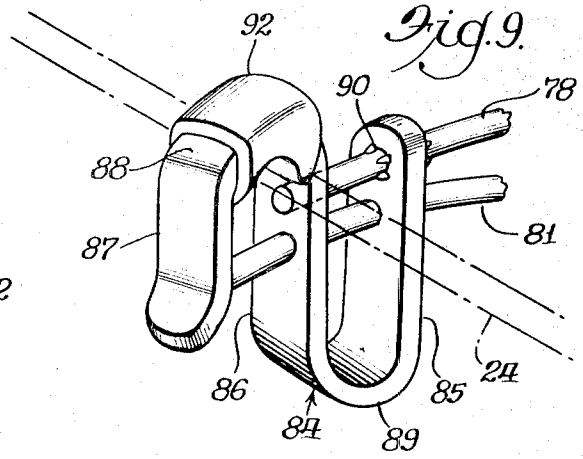


Fig. 9.



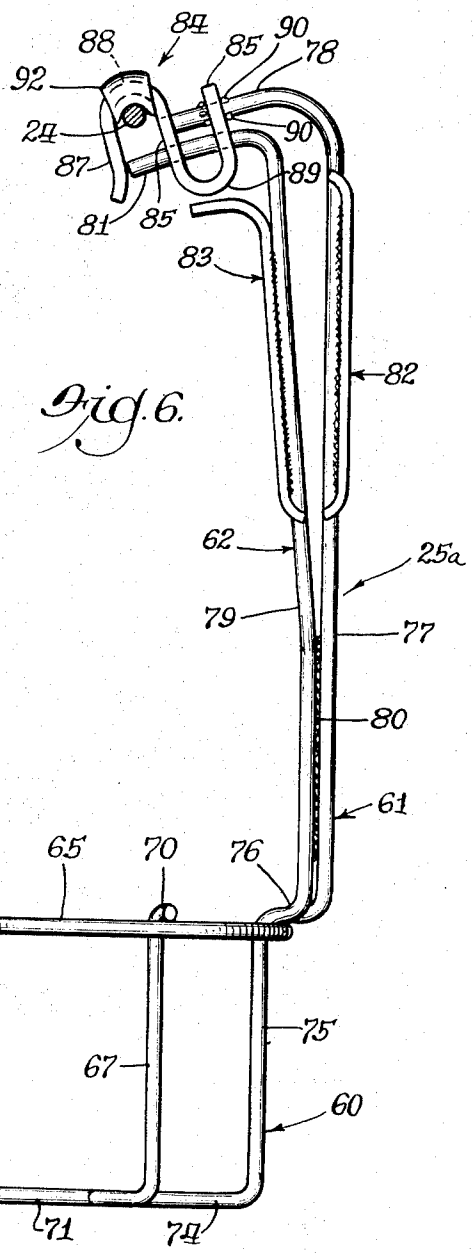


Fig. 6.

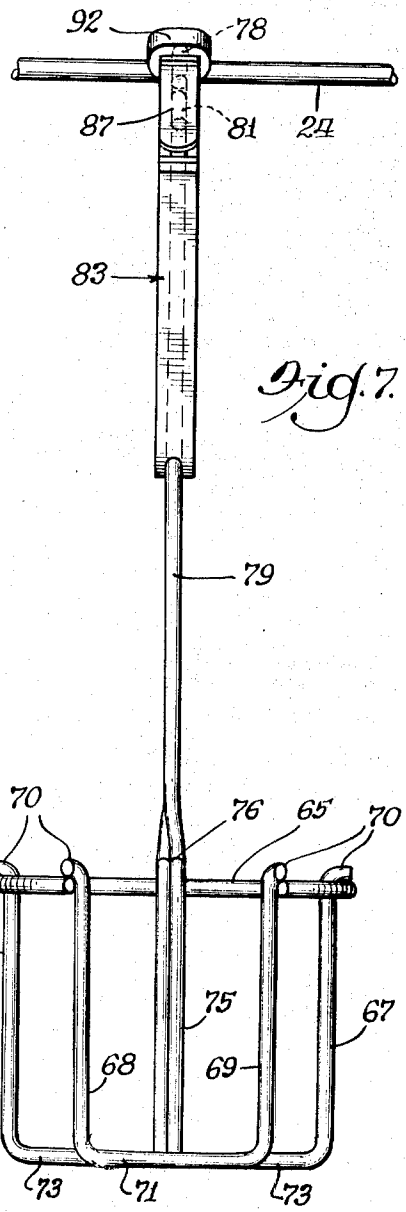


Fig. 7.

DRINK CADDY

This invention relates generally to an improved device for holding drinks on board ship in particular. The problem of safely stowing liquid-filled drinking vessels in a readily accessible location aboard a ship or small craft such that liquids do not spill or fall on the deck or overboard has been confronted for some time. Various efforts have been made to overcome this problem, such as brackets or holders rigidly affixed to the superstructure of the ship and in which a drink container may be placed. However, such an arrangement is generally unsatisfactory since the bracket, being rigidly affixed to the vessel, moves responsively with all ship movements. Thus, a drinking cup, for example, filled with liquid and placed in such a bracket is subjected to a wide variety of gyrations and movements, making liquid storage therein highly hazardous at best. More recently, devices have been innovated for this purpose in which a holder acceptable of a drinking vessel is mounted on biaxial gimbals to accommodate normal roll and pitch of the ship to which it is attached. Such gimbal-mounted devices are more in keeping with the time-honored system of suspending shipboard mounted compasses, lamps and the like to maintain the same substantially level in reaction to pitch and roll. Nevertheless, it is well recognized by those familiar with the sea that biaxial gimbal mounting is not totally foolproof since more erratic movements and radical gyrations of a ship, particularly at or near the movement limits of the biaxial gimbal system, can and do result in rather violent departures of the gimbal supported item from a consistent horizontal attitude. As a consequence, liquid drinks and the like suspended in gimbal mounted brackets often spill and splash out of the drinking vessel or, alternatively, are satisfactorily stored only so long as the level of the liquid therein is maintained low enough to avoid spill-out.

In recognition of the above-outlined difficulties, the hereinafter to be described means of this invention provides a new, improved and simplified portable drink caddy, whereby liquid-containing cans, cups, bottles and other vessels may be safely stored on board ship; the same being removably suspended from the lifelines or other flexible support means with generally universally pivotal or swivel connection so that, regardless of ship's movement, the caddy device gravitationally suspends the drink in a generally upright attitude. As a consequence, liquid containing vessels held in a drink caddy of this invention are easily accessible to the user and may be stored therein with improved assurance against spillage and loss.

One of the primary objects of this invention is to provide an improved device for holding open-top liquid-containing vessels on board a ship or the like.

Another important object of this invention is to provide an improved shipboard device for holding drinks and the like which is portable and may be readily mounted and demounted on a lifeline or similar flexible support system.

A still further object of this invention is to provide an improved device as aforesaid which is easily stored in a compact, nested condition with a plurality of like devices.

A still further object of this invention is to provide an improved drink caddy or device for holding liquid-containing cups, cans, bottles and the like on board ship and which is operationally reactive to the various

movements of a ship in a manner to maintain the liquid-containing vessel in a generally upright condition.

Having thus described this invention, the above and further objects, features and advantages thereof will be recognized by those familiar with the art from the following detailed description of a preferred and modified embodiments thereof illustrated in the drawings, in which:

FIG. **1** is a partial perspective view of a ship having a life rail system to show the manner of mounting the improved drink-holding device of this invention thereon;

FIG. **2** is an enlarged top plan view of a first form of holding device according to this invention, illustrating its mounted condition with a lifeline or like flexible suspension;

FIG. **3** is a side elevational view of the device illustrated in FIG. **2**, taken substantially from vantage line **3—3** of FIG. **2**;

FIG. **4** is a front elevational view thereof;

FIG. **5** is a front elevational view, similar to FIG. **4**, illustrating several devices according to FIGS. **2–4** internested for storage purposes;

FIG. **6** is a side elevational view of a second form of holding device according to this invention;

FIG. **7** is a front elevational view thereof;

FIG. **8** is a top plan view thereof; and

FIG. **9** is an enlarged partial perspective view of swivel hook means employed with the holding device of FIGS. **6–8.**

Turning now to the details of the embodiment illustrated in FIGS. **1–5** of the drawings, reference is first made to FIG. **1** which displays a top side portion of a sailboat or like water-borne craft (indicated generally at **20**) equipped with a life guard railing assembly **21** along the periphery of its deck **22.** As shown, assembly **21** includes plural upright stanchions **23** located at spaced intervals for supporting a flexible cable or lifeline **24** trained between the upper ends thereof. One or more drink-holding devices of this invention, indicated generally by numeral **25,** are detachably mounted along the lifeline **24** to depend downwardly therefrom for the purpose of providing convenient means for storing drink-containing vessels, such as a soft-drink can, indicated generally at **26** in FIG. **3.**

As shown best in FIGS. **2** and **3,** the holding device **25,** according to this invention, comprises an open-top basket portion **30** having hanger means **31** extending upwardly from one side thereof. The hanger means **31** includes a latch means **32** for removably connecting the holding device to the lifeline or cable **24** with desired universal swivel connection.

The basket portion **30** preferably is a wire-formed construction having an open top and semi-open sides and bottom which provide a socket acceptable of a drinking vessel such as the soft drink can **26.** The basket portion includes an annular upper rim member **35** made of galvanized, stainless steel or bronze rod or wire for corrosion-resistant purposes. The annular rim member **35** (see FIG. **4**) defines the upper perimeter of the basket portion **30** and is fixed, as by welding, brazing, or silver-soldering, to the upper ends of four upright arm members **36, 37, 38, 39,** each comprising a wire or metal rod having a finger portion **40** at its upper end adapted to overlie the upper side of the rim member **35** in assembly; turning outwardly from the central axis of the basket portion **30.**

The two arm members **36** and **37** for convenience of manufacture are commonly interjoined by a cross-connecting leg **41** having a central curvilinear bail portion **42** (see FIG. **4**); the arm members **36, 37** and leg **41** comprising a substantially U-shaped member of unitary construction. It is to be noted from FIG. **2** in particular that the arms **36** and **37** are disposed to one side of a central diameter of the rim member **35** and are offset rearwardly from the central bail portion **42** due to the angular formation of the leg **41.**

The other two arm members **38** and **39** are also symmetrically located on opposite sides of a central diameter for the rim member **35** (see FIGS. **2** and **4**), in generally upright position, paralleling the arm members **36** and **37.** As with arm members **36** and **37,** the upper end finger portions **40** thereof are brazed, welded, soldered or otherwise rigidly affixed to the upper side of the rim member **35** in assembly. Extending between the lower end of the arm members **38** and **39** and the central bail portion **42** are a pair of dog leg portions **43,43** divergently related with respect to one another and merging into contacting engagement substantially over the bail portion **42** wherefrom the same extend rearwardly in side-by-side parallel relationship to form a twin base leg portion **44** (see FIGS. **3** and **4**) which merges at its rearward reaches into the lower end of an upwardly extending twin arm member **45.** It is preferred that the individual rod members making up the twin leg portion **44** and the twin arm member **45** be rigidly interjoined in side-by-side contacting relationship as by welding or brazing connection which best may be accomplished substantially at or over the bail portion **42.** It will also be appreciated that the twin arm member **45** extends vertically upwardly in parallel relationship to the other arm members **36–39,** defining with the latter the open sides of the basket portion **30.**

With particular reference to FIG. **3** of the drawings, it will be recognized that the upper end of the twin arm member **45** is bent outwardly and rearwardly over the upper side of the annular rim member **35** at portion **46,** the latter of which merges into the lower end of the upwardly extending hanger means **31.** Portion **46** preferably is fixed to the upper side of the rim member **35** in the same manner employed for fixing the outer end or finger portions **40** thereto. Typically, the angular spread between adjacent arm members **36–39** may be in the order of 72°.

As shown best in FIGS. **2–4** of the drawings, hanger means **31** comprises an upwardly reaching extension of the twin arm member **45** and as such is formed by two parallel side-by-side disposed rigid wires or rods **47,48** which project vertically upwardly from the outer end of portion **46.** The upper ends of the two rods **47** and **48** are curvilinearly formed in semicircular fashion to merge with a forwardly extending linear reach arm portion **50** which extends forwardly over the center of the basket portion **30.** Arm portion **50** in turn terminates in a hook portion **51** having an open bottom or lower side adapted to loosely receive the lifeline or other flexible cable suspension **24** via its open throat.

As best shown in FIG. **4,** the outer ends of the two rods **47** and **48** preferably are integrally interjoined by a reentrant bend **52** at the outermost end of the hook portion **51.** Thus the hook portion, the hanger means **31,** the upright members **47** and **48,** the portion **46,** the twin arm member **45,** the twin leg portion **44** and the angularly related dog leg portions **43,43** as well as the upright arm members **38** and **39** are all part of a single length of rod or wire; the free ends of which comprise the outwardly turned finger portions **40,40** of the arm members **38** and **39.** While such integral formation is preferable, it is fully contemplated that such wire or rod elements making up the hanger means and arm members **38** and **39** may be separate and rigidly interconnected at final assembly to provide an equivalent to the particular integral structure illustrated.

It is important to note that the hook portion **51** which accommodates the lifeline **24** is located substantially over the center of the basket portion **30** and is generally aligned slightly behind the bail portion **42** to promote balance and stability for the loaded holder device in operation.

In order to affirmatively lock or latch the hanger device to the lifeline **24,** the latch means **32** is provided. As best shown in FIGS. **3** and **4** of the drawings, such comprises a length of flat spring metal strapping having a planar lower base end portion **55** affixed to the inside face of the twin rods **47, 48,** near the junction of the latter with portion **46,** as by welding, brazing or silver-soldering. The main body **56** of the latch means **32** extends angularly outwardly from the base portion **55** toward the hook portion **51.** The upper end of body **56** is bent forwardly and downwardly to parallel portion **50** of the hanger means, forming a planar latching finger **57** which normally extends across the open throat side of hook portion **51,** to abut the latter adjacent the reentrantly bent outer end **52** thereof. It will thus be seen that the finger portion **57** operationally underlies the lifeline **24** and locks the same within the hook portion **51,** as best shown in FIG. **3.** The metal strap material of the latch means **32** is sufficiently resilient and spring-like to permit the same to be biased rearwardly toward the hanger member **31** (substantially to its dotted line position designated **32a** in FIG. **3** of the drawings.) In this condition, the outer end of the latch finger portion **57** clears the throat of the hook portion **51** so that holding device **25** may be lifted upwardly to clear the lifeline **24.** On the other hand, when the latch means **32** is biased forwardly, in its normal locking position, as shown in full lines in FIG. **3,** the finger portion **57** thereof securely locks the holding device onto the lifeline **24** preventing the latter from escaping the open hollow of the hook portion **51.**

It is of particular importance to note that the open center of the hook portion **51** is sufficient to permit generally free swinging or pendulum movement of the holding device **25** about the lifeline **24.** Thus as shown at FIGS. **2, 3** and **4,** for example, the holding device **25** is movable about the lifeline (see dotted line positions of FIGS. **3** and **4**) to effectively permit the basket portion to move as a pendulum in multi-axial directions about the lifeline. This feature in particular produces generally upright stability to a container or drink-carrying vessel **26** stored in the holding device **25,** preventing spillage or the loss of the liquid, even during the most violent movements of the ship or boat.

As illustrated in FIG. **5** of the drawings, due to the formation of the basket portion **30** with generally open sides defined by the several spaced wire arm members and the location of the latter on the inside of the rim member **35,** storage of several baskets in a nested condition is readily permitted. This is best accomplished by internesting the basket portions of the several hangers so that the arm members of one basket lie alongside the

arm members of the underdisposed basket. As shown, the several hanger means thereof likewise lie in side-by-side adjacency in such nested condition. This internested relationship of three holding devices **25,25***a* and **25***b* having hanger means **31, 35***a* and **35***b*, respectively, is shown in FIG. **5.** In practice, approximately 10 such devices may be nested for storage purposes.

Turning now to the details of the modified embodiment illustrated in FIGS. **6** through **9** of the drawings, the portable holding device **25***a* therein shown comprises an open top basket portion **60** having hanger means **61** extending upwardly from one side thereof, and a latch means **62** for removably locking the holding device to the lifeline **24.**

The basket portion **60** of device **25***a* preferably is a wire-formed construction having an open top and semi-open sides and bottom formed to accept a drinking vessel. As shown in FIGS. **7** and **8,** the basket portion includes a generally semicircular rim member **65** which defines the upper perimeter of the basket portion **60.** Rim member **65** is fixed to the upper ends of four upright arm members **66,67,68,69,** each having an outwardly turned finger portion **70** adapted to overlie the upper side of the rim member **65.** The rim member **65,** as noted, is open at one side so that the formed basket portion **60** readily accommodates a drinking vessel having a handle, such as a cup.

The two arm members **68** and **69** are commonly interjoined for convenience of construction by an integral cross-connecting leg **71,** of substantially V-shaped formation (see FIG. **8**). It is to be noted that the arms **68, 69** and leg **71** are disposed symmetrically to one side and forwardly, of a central diameter of the rim member **65,** and that the finger portions **70** of said arms overlie and are rigidly affixed to opposite ends of the rim member **65** as by welding, brazing, soldering or the like.

The other two arm members **66** and **67** of the basket portion are also symmetrically located on opposite sides, but rearwardly of a central diameter of the rim member **65** and positioned in a generally upright position, paralleling the arm members **68** and **69** as best illustrated in FIGS. **6** and **8.** The upper end finger portions **70** of these arms likewise are rigidly affixed to the upper side of the rim member **65** to provide a rigid basket formation.

Extending between the lower ends of arm members **66** and **67** are a pair of leg portions **73,73** divergently related with respect to one another and merging into contacting engagement approximately at the center of the basket bottom near the apex end of the V-shaped cross-connecting leg **71,** to which the same are rigidly affixed, as by welding, brazing, soldering, etc. Leg portions **73,73** extend rearwardly from the V-shaped leg **71** in parallel, side-by-side relationship to form a twin base leg portion **74** which merges at its rearward reaches into the lower end of an upwardly extending twin arm member **75.** It is preferred that the individual rod members comprising the twin base portion **74** and the twin arm member **75** be rigidly interjoined in contacting relationship as by welding, brazing or the like.

The twin arm member **75** extends vertically upwardly in parallel relationship to the other arm members **66–69,** defining with the latter the open sides of the basket portion **60.** It is to be noted that the bottom of the basket **60** in this modified embodiment is flat, because the leg portions thereof **71,73,74** do not cross over each other, in contrast to the basket portion **30** illustrated in FIGS. **2** through **5.** This permits the device **25***a* to rest upright on its basket bottom, if desired.

With particular reference now to FIG. **6** of the drawings, it will be seen that the upper end of twin arm member **75** is bent outwardly and rearwardly over the upper side of the open rim member **65** at portion **76,** which, like portion **46** in FIG. **3** is fixed to such rim member. As best shown in FIGS. **6** and **7** of the drawings, the twin arm member **75,** immediately beyond rim member **65,** extends upwardly to provide both the hanger means **61** and the latch means **62.**

Hanger means **61** comprises an upwardly reaching linear portion **77** of one rod arm of the twin arm member **75** and has the upper end thereof curvilinearly formed or bent forwardly in semicircular fashion to merge with a forwardly extending linear reach arm portion **78** extending forwardly over the center of basket portion **60.**

The latch means **62** similarly comprises an upwardly extending portion **79** of the other rod or arm which forms the twin arm member **75;** the same being aligned registeringly in front of portion **77** (see FIG. **6**) and fixed thereto by a welded, brazed or similar connection, as at **80,** beyond which it is separated from portion **77.** The upper or outer end of rod portion **79,** like portion **78** is bent in semicircular fashion to merge with a forwardly extending linear reach arm portion **81** extending forwardly over the center of basket portion **60** and spaced registeringly beneath arm portion **78.**

Portions **77** and **79** are each fitted with a finger grip piece **82,83,** respectively, comprising a length of flat metal strapping, each piece being rigidly attached to its associated portion **77** or **79** with piece **83** curving forwardly toward the center of the basket portion at its upper end to form a convenient hard grip for the latch means **62.**

As best seen in FIGS. **6** and **9,** arm portions **78** and **81** are interjoined by an S-shaped metal swivel hook means **84** which cooperates with latch means **62** and is formed with three integral parallel, spaced flat or planar sections **85,86,87;** the center section **86** being joined at its opposite ends to sections **87** and **85** by intervening semicircular bend portions **88** and **89,** respectively, while the outermost section **87** of the hook means has an out turned lip to guide the bend portion **88** over lifeline **24.**

The rod-like arm portions **78** and **81** provided at the outer ends of the hanger and latch means pass through holes formed in the parallel sections **85** and **86** of the hook means. It will be noted, however, that only the lower arm portion **81** passes beyond the center section **86** and that the outer end thereof normally abuts the inside face of hook section **87** to form a latching barrier or finger beneath the bend **88** of the hook means. By this expedient the hanger device **25***a* is locked onto the lifeline (see FIG. **6**).

The upper arm portion **78,** which passes through, but not beyond the center section **86** of the hook means **84** is rotatably anchored to the latter by means of several upset deformations **90** located on opposite sides of the innermost hook section **85.** This prevents the hook means from sliding along arm **78** while permitting the same to rotate relative thereto; such rotating being resiliently limited, however, by the arm portion **81** of the

latch means which passes through both sections **85** and **86** of the hook means.

The rod portion **79** of the latch means is sufficiently resilient and spring-like to permit the same to bias rearwardly toward the hanger rod portion **77** so that the outer end of the latching finger thereon will clear the open throat of the hook portion formed by outer section **87**, bend portion **88**, and central section **86**. Thus the holding device **25***a* may be lowered onto or lifted upwardly to clear the lifeline **24** after retracting the latching finger. On the other hand, when the latch means **62** is biased forwardly in its normal position the latching portion **81** thereof securely locks the holding device onto the lifeline **24**, preventing the latter from escaping the throat of the hook means **84**.

In order to prevent the hook means from sliding along the lifeline too freely, a rubber sleeve **92** or the like preferably is provided about bend portion **88** of the hook means as best shown in FIG. **9**.

As in the first embodiment described and shown in FIGS. **2** through **5**, of the modified hanger device **25***a* is sufficiently loose fitting over the lifeline to permit generally free swinging, pendulum movement thereof about the lifeline **24**, thus permitting the basket portion to move freely in multiaxial directions. However, due to the modified swivel hook means **84** and its limited rotational connection with arm portion **78** of the hanger means, the holding device **25***a* is free to rotate about an axis passing centrally along the center of such upper arm portion **78** and generally aligned perpendicular to the lifeline in the mounted position for device **25***a*. This rotatable movement is approximately 30° from the vertical position due to the flexing of the lower arm portion **81** of the latch means. Thus device **25***a* has improved freedom of movement in a vertical plane passing through the lifeline over that provided by the rigid hook embodiment of device **25** illustrated in FIGS. **2** through **5**. This feature desirably provides improved stability to a drink-carrying vessel stored in the modified holding device **25***a*.

I CLAIM:

1. A portable drink holding device for shipboard use comprising: an open top basket portion receptive of a drinking vessel, hanger means extending upwardly of one side of said basket portion and having a single hook portion located at the outer end thereof and provided with an open side located substantially centrally over said basket portion and facing the latter, said hook portion being loosely receptive of a lifeline; and resilient latch means normally removably obstructing the open side of said hook portion whereby to positively couple the device in pendulum fashion to the lifeline for limited multi-axis gyratory movements thereabout.

2. The invention of claim **1** wherein said latch means is manually operable and comprises an elongated cantilever mounted body having spring-like resiliency, the outer end of which body is normally resiliently biased thereby across the open side of said hook portion beneath the lifeline.

3. The invention of claim **1** wherein said latch means comprises an elongated body of spring metal having a base portion rigidly affixed to said hanger means and a latching finger comprising the outer free end thereof, said body being normally spaced from said hanger means and said finger being operably movable away from the open throat of said hook portion by manually depressing said body toward said hanger means.

4. The invention of claim **1** wherein said basket portion has generally cylindrical open sides formed by a plurality of wire rod members comprising parallel circumferentially spaced arm members forming the open sides thereof, radially extending legs interjoining the lower ends of said arm members and arranged to intersect substantially centrally of the bottom of said basket portion, and a rim member rigidly affixed circumferentially about the upper ends of said arm members and defining the diameter of said basket portion.

5. The combination of claim **4** wherein said hanger means and certain of said arm members and legs of said basket portion are integrally formed.

6. The combination of claim **4** wherein said arm members are located at a common radial distance about the central axis of said basket portion and radially inwardly of said rim member in circumferentially spaced arrangement whereby a plurality of the caddy devices having basket portions of like diameter may be coaxially internested for storage purposes with the said arm members of the nested devices lying in a common circumference.

7. The combination of claim **4** wherein said rim member defining the diameter of said basket portion is open on one side opposite a circumferential space between two of said arm members to permit the storage of a handle equipped vessel in said basket portion.

8. The invention of claim **1** wherein said hook portion comprises an S-shaped swivel hook means rotatably mounted over the free end of said hanger means for relative movement therebetween about an axis generally perpendicular to a lifeline on which the device is mounted, with said latch means interengaging said swivel hook means and operating to resiliently dampen said relative movement.

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