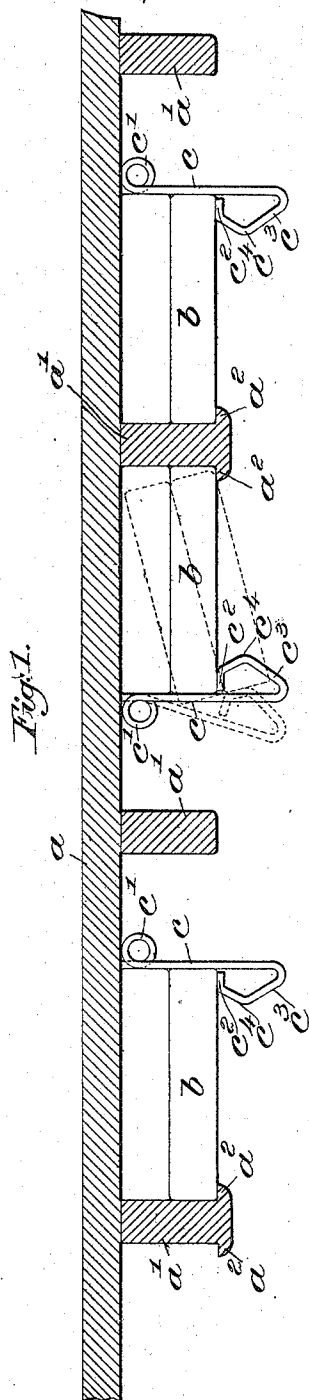


(No Model.)

J. T. COPITHORN.
LIFE PRESERVER SUPPORT FOR VESSELS.

No. 576,303.

Patented Feb. 2, 1897.



Witnesses.

Fred S. Gumbel.

Thomas J. Drummond.

Inventor

John T. Copitt Horne.

By Crosby Gregory.

cells.

UNITED STATES PATENT OFFICE.

JOHN T. COPITHORN, OF MELROSE, MASSACHUSETTS.

LIFE-PRESERVER SUPPORT FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 576,303, dated February 2, 1897.

Application filed January 2, 1896. Serial No. 574,120 $\frac{1}{2}$. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. COPITHORN, of Melrose, county of Middlesex, State of Massachusetts, have invented an Improvement in Life-Preserver Supports for Vessels, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

Prior to this invention the usual method of hanging or carrying life-preservers on board vessels has been to place the same in suitable pockets under the seats, stack them upon suitable shelves, or most frequently support them upon wires strung along the under sides of the carlines, on which is supported the deck or floor above. When the latter method is employed the life-preservers of the ordinary size usually fill or nearly fill the space between adjacent carlines, and since the supporting-wires are so arranged that each life-preserver rests upon and is supported by at least two of the wires it becomes exceedingly difficult to remove the life-preservers when needed. Especially is this true in cases of accident or emergency, when the majority of passengers lose their heads, and I have found at such times that most passengers experience great difficulty in removing the life-preservers for use.

My present invention has for its object to produce a novel support for life-preservers which shall overcome the objections above referred to.

My invention consists in supporting the life-preservers at one or both their opposite edges by yielding hangers, whereby the life-preservers may be individually and readily removed without the usual difficulty of extracting them from behind supporting-wires, the said yielding hangers being so constructed as to readily yield under pressure, tending to remove the life-preservers.

In the preferred embodiment of my invention the life-preservers will be supported at one of their edges by ribs, or it may be continuous supports on the carlines, and at their edges opposite said continuous supports by the yielding hangers, this arrangement enabling me to dispense with a large number of yielding hangers which would be necessary were the life-preservers to be supported by

the same at both their edges, and in the following specification I shall describe my invention as embodied in this preferred construction, but I desire it to be understood that my invention is not to be limited to this construction alone.

In the drawings, Figure 1 in section shows a vessel's deck supported upon usual carlines with the life-preservers hung therefrom in accordance with my invention; Fig. 2, an under side view of Fig. 1.

In the embodiment of my invention shown in the drawings and selected for illustration the deck *a* is supported upon the usual carlines *a'*, as is now common in the construction of vessels. In the construction shown I have provided the alternate carlines at their lower edges with laterally-extended preferably continuous lips *a²*, upon which one of the edges of the life-preservers *b* may be placed and supported, the opposite edges of said life-preserver being shown in each instance as supported upon the yielding hangers *c c*, (herein shown as made from resilient material, such as spring-wire,) coiled at *c'* to give greater resiliency and freedom of movement, and at their lower ends bent upwardly and inwardly to form hook-like supports *c²*, having beveled under faces *c³* and also preferably beveled upper faces *c⁴*.

Assuming the life-preservers to be in position, as indicated in full lines, Figs. 1 and 2, for removal of the same in cases of emergency, it is simply necessary for the passenger to reach up and grasp a preserver between its yielding hangers *c c* and pull that edge of the preserver down to release the same from its supports and enable it to be readily removed for use.

Any pull upon the edges of the preserver adjacent the yielding hangers will cause the latter to move back into their dotted-line position, Fig. 1, to release the adjacent edge of the preserver, enabling the latter to be drawn down and disengaged from the yielding hangers and thereafter readily drawn to one side off from the continuous edge support *a²*.

To insert a preserver in its normal position, one edge is placed upon the continuous edge support *a²* and the opposite edge is pushed directly upward, the preserver swinging, as it were, about the support *a²* as a fulcrum,

the preserver striking the lower beveled faces c^3 of the yielding hangers and pushing the same back sufficiently to enable the preserver to pass above the support c^2 , when the hangers spring back into position, holding the preservers as shown in the drawings.

The life-preservers commonly used comprise a plurality, usually six, sections flexibly connected, as by canvas, and in the method heretofore employed for hanging the same upon wires strung along under the carlines the preservers have necessarily been arranged with their greatest length at right angles to the length of the carlines, that is, the length of the individual sections of the preservers would lie parallel with the carlines, so that the two supporting-wires for each preserver would cross and support the opposite ends of each of the three under sections of the preserver, and when so arranged the length of the preserver is such as to reach completely across from one to the other carline, leaving practically no space in which the fingers may be inserted for the withdrawal of the preservers. By my invention, however, the preservers are turned at right angles to their usual position, that is, they are arranged with their greatest length in the direction in which the carlines extend, the lengths of the sections extending transversely to the carlines, as best shown in Fig. 2, and when so positioned one of the edges of all the sections of the preserver is supported by the continuous edge support a^2 , so that the middle section cannot sag, the opposite edge of the preserver being carried by the yielding hangers, as described, thereby leaving a considerable space between the edge of the preserver and the next adjacent carline to enable the user to readily grasp the end of the preserver for use.

While for convenience I prefer to provide the alternate carlines with oppositely-extended lips, yet it is obvious that my invention need not be restricted to this arrangement, for the lips or supports may be arranged upon the carlines or any of them, as desired, and while I prefer to make said lips or supports a^2 continuous, or substantially so, for convenience in manufacture and for better supporting the preservers, yet it is obvious said supports need not be continuous.

The main feature of my invention lies in the use of yielding hangers for the edges of the life-preservers, whereby the latter may be readily removed for use when needed, and my invention therefore is not limited to the particular embodiment herein shown, for it is evident the same may be varied without

departing from the spirit and scope of my invention.

Having described my invention, and without limiting myself as to details, what I claim, and desire to secure by Letters Patent, is—

1. As a means for hanging life-preservers, the combination with a suitable edge support for one edge of the life-preserver, of one or more yielding hangers holding the opposite edge of said life-preserver, constructed to yield when the life-preserver is pressed against the same to enable the preserver to be readily withdrawn for use, substantially as described.

2. As a means for hanging life-preservers, the combination with a suitable support for one edge of a life-preserver, of one or more yielding hangers pressing against the opposite edge of said life-preserver, said hanger or hangers being suspended and provided with free hooked ends for the support of said life-preserver, substantially as described.

3. As a means for supporting life-preservers, the combination with a continuous edge support, of one or more yielding hangers arranged opposite said support and adapted to yield for and by insertion and removal of the life-preserver, substantially as described.

4. The combination with the deck and the carlines supporting the same, of life-preserver supports arranged on and carried by the said carlines to support one of the edges of life-preservers and the yielding hangers engaging the opposite edges of said life-preservers, substantially as described.

5. The combination with the deck and carlines supporting the same, of life-preserver supports connected therewith and arranged to hold the life-preservers between the carlines and with one of the edges of said preservers separated from the adjacent carline, the said supports being adapted to release the life-preservers on a downward pull on the latter substantially as described.

6. The combination with the deck and its carlines, of spring-supports for the life-preservers, and means to cause said spring-supports to yield automatically to release the life-preservers under the action of a pull thereupon substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN T. COPITHORN.

Witnesses:

FREDERICK L. EMERY,
MARGARET A. DUNN.