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BOAT FENDER

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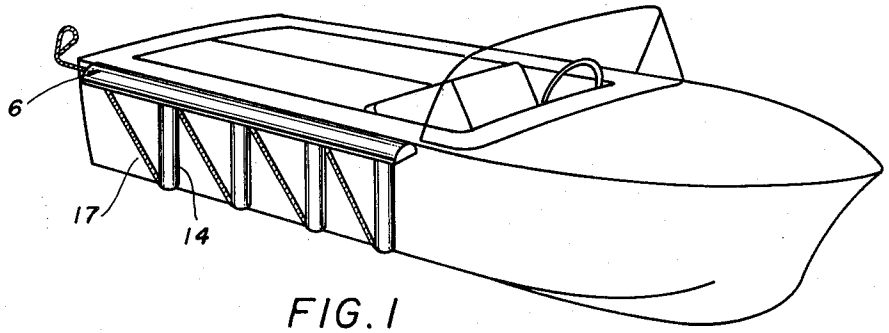


FIG. 1

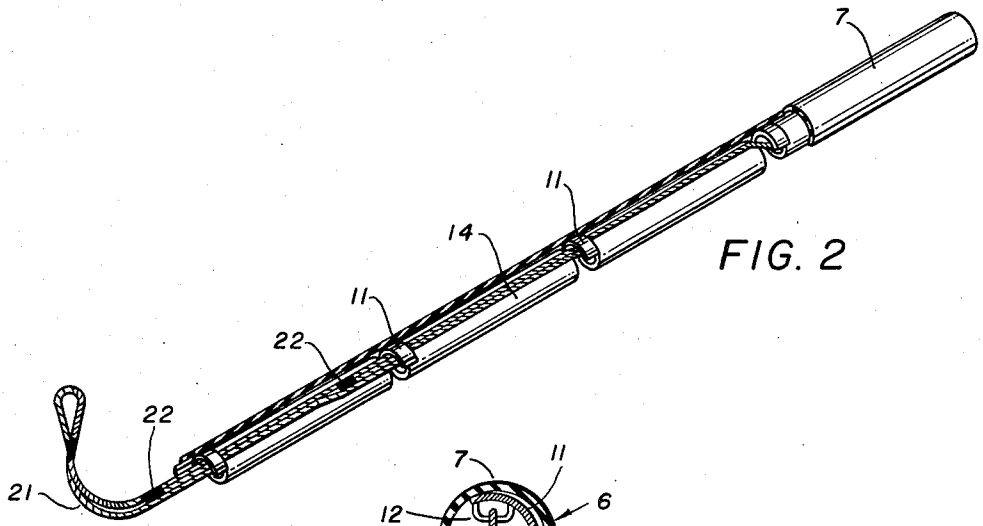


FIG. 2

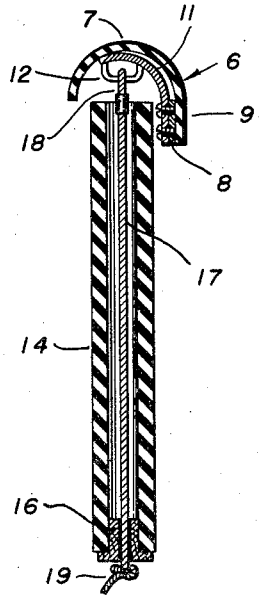


FIG. 3

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BOAT FENDER

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6 Claims. (Cl. 114—219)

This invention relates to an improved boat fender.

It is usual to interpose a fender between the hull of a boat and an adjacent pier to which the boat may be secured so that the boat hull does not rub or scrape against the pier and so be damaged. Since the boat may engage the pier at a number of points, the use of several fenders is usual. While the fenders can be left in place while the boat is underway, they may drag in the water. In addition, they do not improve the appearance of a boat; their being in place, however, when a boat is taken alongside a pier is desirable to avoid any harmful contact. Hence, a landing requires the fenders to be in position.

In accordance with the present invention, we provide a fender construction in which a plurality of fenders can be moved between a position in which the fenders are hidden and out of sight, and one in which they are fully operative. It will be apparent from this that such a fender construction is of particular advantage for it enables the fenders to be kept out of sight and harm's way when not in use, yet be ready for instant use when desired.

It is in general the broad object of the present invention to provide a novel and improved fender construction enabling a boat's fenders to be provided in operating position as desired.

The invention includes other objects and features of advantage, some of which, together with the foregoing, will appear hereinafter wherein the preferred form of fender construction of this invention is disclosed. In the drawing accompanying and forming a part hereof, FIGURE 1 is a perspective view showing a typical fender construction in place on a boat.

FIGURE 2 is in a perspective view, partly broken away, showing the fender construction with the fenders retracted.

FIGURE 3 is a section taken through the support device and a typical fender.

Referring to the drawing, the fender construction includes a support member generally indicated at **6**. This is made up of an arcuately formed flexible housing **7** having a metal strip **8** running its length. This support structure is secured in any desired manner to the side of the boat so that it extends above the water line, as appears in FIGURE 1. The housing is generally semi-circular in cross-section as appears in FIGURE 3.

At spaced intervals along the run of the strip **8**, arcuately formed arms **11** are secured by screws **9**. Each arm has a U-shaped ring **12** secured thereto. The arms **11** are provided at spaced intervals along strip **8**, the distance between them being slightly greater than the length of a fender **14**.

Each fender **14** is made up of a tubular length of some flexible material, such as rubber or the like. At its lower end, each fender is closed as by a plug **16**. A cord **17** is attached as at **18** to a ring **12**, the cord being extended through the tubular fender **14** and the plug **16**. A knot or other fastening means **19** is provided in the cord to hold the fender in place on the cord. The cord extending from the lower end of the last or rear-most fender at the stern of the boat is extended diagonally upwardly and is threaded through the rings **12** from which the other fenders are supported so that its end **21** extends

beyond the support **6**. The cords from each other fender are similarly extended and threaded; each cord is secured as by clamp **22** to the cord from the next adjacent fender. Thus, when the cord is moved forwardly relative to the support **6**, the several fenders will be drawn into the retracted position in which they appear in FIGURE 2 and wherein they are within the support **6**. When the cord is released, the fenders drop into the position in which they appear in FIGURE 1 and in which position they are available to protect the boat with their usual fending action.

From the foregoing, we believe it will be apparent that we have provided a novel, simple and improved fender construction for a boat.

We claim:

1. A boat fender construction comprising a support member adapted to be secured to a boat hull in a generally horizontal position, a plurality of separate fenders each hinged at one end on the support member at spaced intervals along the support member and adapted to be rotated about said hinged end from a first depending position to a second position in which each fender extends along the support member substantially in engagement therewith, and a cord joined to each fender and extended along the support member for rotating each fender from said depending position to said second position.

2. A boat fender construction comprising a support member adapted to be secured to a boat hull in a generally horizontal position, a plurality of separate fenders each hinged at one end on the support member at spaced intervals along the support member and adapted to be rotated about said hinged end from a first depending position to a second position in which each fender extends along the support member, and a cord extended along said support member and joined to each fender for rotating each fender about said hinged end and with respect to the support member between said first position in which each fender is normal to said support member and said second position in which each fender is parallel to said support member.

3. A boat fender construction comprising a support member adapted to be secured along the gunwale of a boat in a generally horizontal position, a plurality of separate fenders each hinged at one end on the support member at spaced intervals along the support member and adapted to be rotated about said hinged end from a first depending position to a second position in which each fender extends generally parallel to the support member substantially in engagement therewith, a first cord extended along the support member, and a cord extended from the depending end of each fender and joined to said first cord whereby movement of the first cord along said member is effective to rotate each fender from said depending position to said second position.

4. A boat fender construction comprising a support member adapted to be secured along the gunwale of a boat in a generally horizontal position, a plurality of separate tubular fenders, a cord extended through each tubular fender to support each fender in a hinged position on the support member at spaced intervals along the support member for rotation from a first depending position to a second position in which each fender extends along the support member, and a pull cord extended along said support member and joined to each fender cord for rotating each fender about said hinged end and with respect to the support member between said first position in which each fender is normal to said support member and said second position in which each fender is parallel to said support member.

5. A boat fender construction comprising a supporting member generally semi-circular in cross section and

adapted to be secured to a boat hull in a generally horizontal position, said supporting member having spaced therealong a plurality of pivot elements, said pivot elements having axes positioned normal to said boat hull when the said supporting element is attached to the said boat hull; a plurality of separate fenders each supported by one of said pivot elements, each of said fenders being adapted to pivot about an axis of a pivot element, each of said fenders being cylindrical in cross section and capable of fitting within the said semi-circular support member, and means for placing each of the said fenders in a horizontal position within the said semi-circular support member or in a generally vertical position perpendicular to the said semi-circular support member.

6. A boat fender construction comprising means for securing a plurality of pivot elements to a boat hull in a generally horizontal line, said pivot elements being spaced equidistantly and having axes positioned normal to said boat hull when attached thereto, a plurality of separate fenders each supported by one of said pivot elements, each of the said fenders being of a lesser length than

the space between each of the said pivot elements, each of the said fenders being attached to a pivot element about an axis thereof, a cord extending to the end of each of the said fenders farthest removed from the said pivot element therefor, each of the said cords being supported by a pivot element laterally spaced therefrom, each of the said cords having means secured thereto whereby said means may be pulled to move each of the said fenders from a first position wherein the said fenders each lie vertically to a second position wherein the said fenders lie in a horizontal plane and in a single straight row.

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