Jan. 2, 1951 H. H. JOHNSON 2,536,551

BOAT PROTECTING DEVICE

Filed March 2, 1948

FIG. 1.

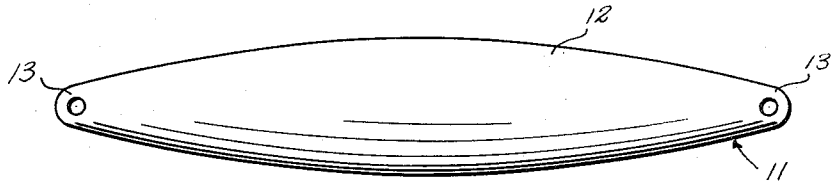


FIG. 2.

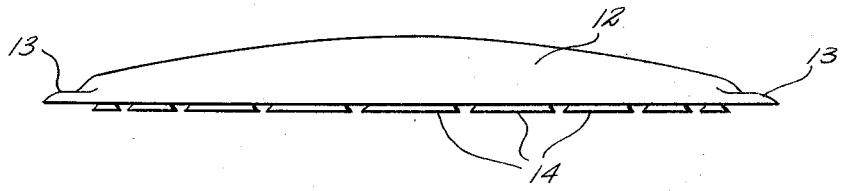


FIG. 3.

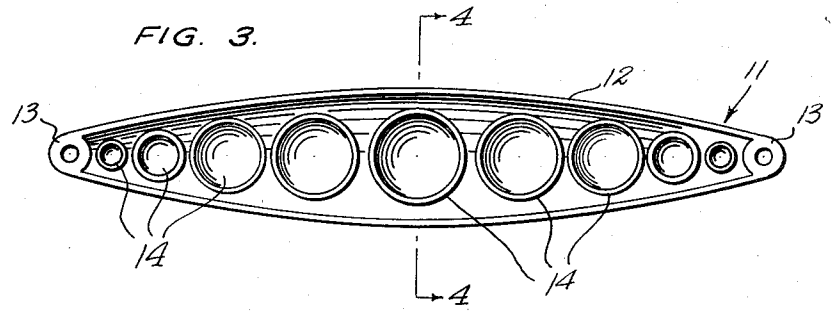
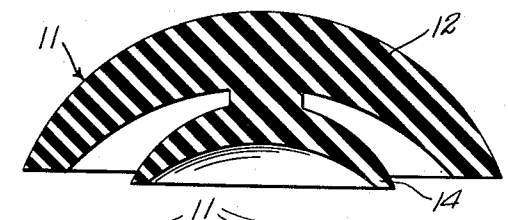


FIG. 4.



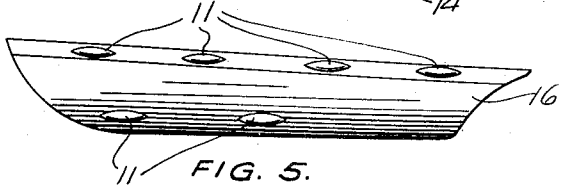


FIG. 5.

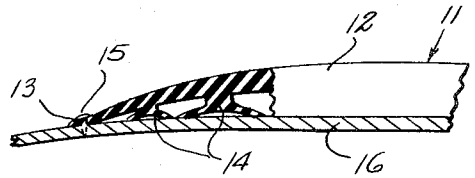


FIG. 6.

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Patented Jan. 2, 1951 2,536,551

UNITED STATES PATENT OFFICE

2,536,551

BOAT PROTECTING DEVICE

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Application March 2, 1948, Serial No. 12,645

2 Claims. (Cl. 114—219)

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This invention relates to bumper devices, and more particularly to bumper devices for use on boats.

A main object of the invention is to provide a novel and improved marine bumper or fender for use on the sides and bottom of a small boat for protecting the surface of the boat against scraping or other injury in the event of contact with obstacles in the water with docks and piers, or with the shore when the boat is beached, said bumper being very simple in construction, very easy to install and providing a very efficient cushioning and protective action.

A further object of the invention is to provide an improved boat protector or bumper adapted to be attached to the side or bottom of a boat or canoe for protecting the boat or canoe surface against abrasion or other injury due to contact with obstructions or rubbing against piers, docks, or other marine structures, or when the boat is being beached, said protector being inexpensive to manufacture, durable in construction and inconspicuous in appearance.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawings, wherein:

Figure 1 is a top plan view of a boat bumper constructed in accordance with the present invention.

Figure 2 is a side elevational view of the boat bumper of Figure 1.

Figure 3 is a bottom view of the boat bumper of Figure 1.

Figure 4 is an enlarged cross-sectional view taken on line 4—4 of Figure 3.

Figure 5 is a side elevational view of a boat showing a plurality of boat bumpers according to this invention installed thereon.

Figure 6 is an enlarged fragmentary horizontal cross-sectional detail view taken through the gunwale of the boat of Figure 5, showing a boat bumper of the present invention operatively installed thereon.

Referring to the drawings, the bumper element is designated generally at 11 and is formed preferably of molded rubber or similar resilient material. Bumper element 11 comprises an elongated concave body portion 12 which has maximum width at its center portion and tapers toward its end portions, said end portions being formed with apertured tab members 13, 13. Depending from the bottom wall surface of body portion 12 are spaced suction cups 14, the cups increasing progressively in size from the ends of

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body portion 12 toward the mid point thereof. Normally the bottom plane of the suction cups 14 is spaced a short distance below the bottom plane of body portion 12, as shown in Figures 2 and 4.

In installing the bumper element, pressure is applied to the body portion 12 to flatten it out so that the suction cups 14 are spread and the peripheral edge of body portion 12 abuts the surface on which the bumper element is being installed. The bumper element is fastened to said surface by wood screws or the like, shown at 15, engaged through the apertured end tabs 13, 13, as shown in Figure 6. Prior to installation the edges of the body portion 12 and suction cups 14 may be moistened to provide a vacuum seal within the body portion and the suction cups when the bumper element is installed as above described.

As shown in Figure 5, plurality of bumper elements 11 may be installed along the gunwales of a boat 16, to protect the boat against collision or impact at the gunwales, and additional bumper elements 11 may be installed at the bottom surface of the boat to protect said bottom surface against abrasion or scraping by submerged objects, or by the ground when the boat is being beached.

The bumper device 11 may also be employed to make emergency repairs, as to cover a puncture or fracture of the boat surface caused by collision with sharp rocks or the like.

While a specific embodiment of a bumper device for use on small boats, canoes, or the like, has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. A bumper device for boats comprising an elongated concave body member of resilient material tapering from its mid portion to its end portions and formed at said end portions with apertured tabs, said body member being provided with a suction cup secured to and depending from its bottom wall at said mid portion, the bottom plane of the suction cup being normally extended below the bottom plane of said body member.

2. A bumper device for boats and the like, comprising an elongated concave body member formed of rubber-like resilient material and tapering from its mid portion to its end portions,

said end portions being formed with apertured tabs adapted to receive a fastening member, said body member being integrally formed with a plurality of spaced suction cups depending from its under surface, the plane of the peripheral edges of said suction cups being normally extended below the bottom plane of the peripheral edge of the body member and the cups increasing in size from the end portions of the body member toward the mid portion thereof.

HUGO H. JOHNSON.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
863,124	Welton	Aug. 13, 1907
1,361,902	Porteous	Dec. 14, 1920
2,027,800	Whitlock	Jan. 14, 1936
2,175,941	Keays	Oct. 10, 1939
2,227,541	Groff	Jan. 7, 1941
2,389,729	Howland	Nov. 27, 1945