Nov. 8, 1960 J. S. ERKERT 2,959,146

BUMPER ASSEMBLY FOR BOATS

Filed Dec. 3, 1958

Fig. 2.

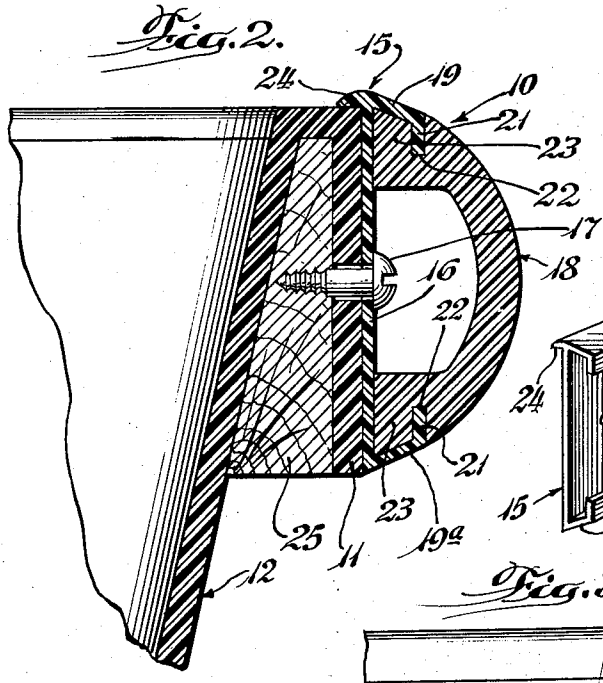


Fig. 4.

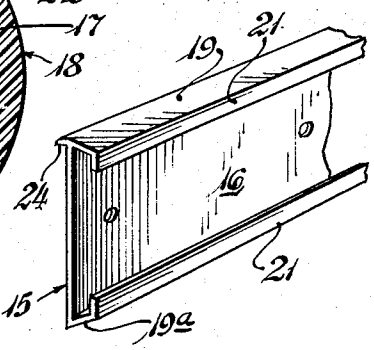


Fig. 3.

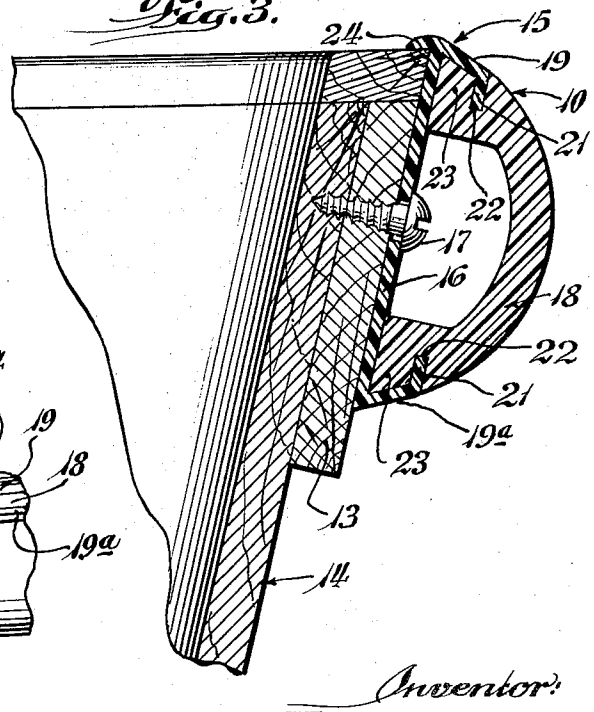
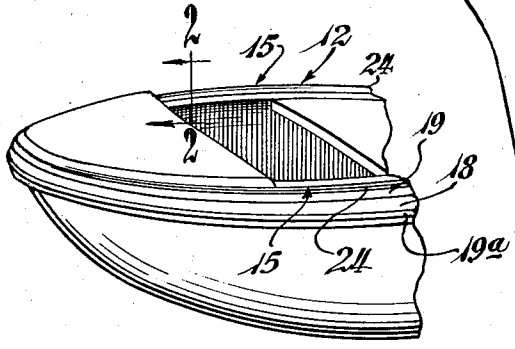


Fig. 1.



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BUMPER ASSEMBLY FOR BOATS

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1 Claim. (Cl. 114—219)

The present invention relates to a bumper construction and more particularly to a novel bumper assembly having a rigid part providing a support adapted to be anchored to the gunnel or side of a boat and a flexible part projecting from the support providing a bumper.

Among the objects of the present invention is the provision of a novel bumper assembly composed of a rigid channel member securely anchored to the gunnel of a boat and a relatively soft insert or bumper anchored in a novel manner to the channel member.

The present invention further comprehends a novel two-piece bumper assembly formed of a plastic composition, one part of which comprises an inner member providing a channelled base formed of a rigid plastic composition and the other an insert of relatively soft plastic composition anchored in the channelled base, the latter being securely affixed and retained on the gunnel by rigid anchoring means, such as screws.

The novel base and the insert or bumper are each formed of plastic composition with the composition of the base providing a rigid support, and the projecting bumper insert formed of a relatively soft and flexible member of concavo-convex shape anchored and retained upon the base in a novel manner to provide an effective bumper for the boat.

Further objects are to provide a construction of maximum simplicity, efficiency, economy and ease of assembly and operation, and such further objects, advantages and capabilities as will later more fully appear and are inherently possessed thereby.

In the drawing:

Figure 1 is a view in perspective of a portion of a boat to which the novel bumper assembly is applied.

Fig. 2 is an enlarged fragmentary view in vertical cross section through a side of a fiberglass boat to which the novel bumper assembly has been affixed, the view being taken on the line 2—2 of Fig. 1.

Fig. 3 is a view similar to Fig. 2, but with the novel bumper assembly shown affixed to a boat of wood construction.

Fig. 4 is a fragmentary view in perspective of the channel support.

Referring more particularly to the disclosure in the drawing and to the novel illustrative embodiment therein shown, Fig. 2 shows the novel bumper assembly **10** affixed to an upper edge or gunnel **11** of a fiberglass boat **12**, while Fig. 3 shows the novel bumper assembly **10** affixed to the gunnel or upper edge **13** of a wood constructed boat **14**.

The novel bumper assembly **10** comprises a two-piece unit including a channelled support or anchoring member **15** having its base **16** rigidly secured and anchored to the gunnel by suitably spaced screws or anchoring means **17**, and a flexible or resilient insert **18** affixed to the base in the novel manner shown. Each of the component parts **15** and **18** of the bumper assembly is formed of a plastic composition, preferably of a vinyl resin, with the composition of the support being of approximately 100 plus

durometer on the A scale and the insert **18** of approximately 50 to 80 durometer, and thus capable of being flexed for assembly and to provide a soft, flexible bumper upon impact.

To assemble the insert **18** on the channelled support **15**, the latter is provided with forwardly and inwardly inclined sides **19** and **19a** projecting from the base **16** and each having an inturned flange **21** adapted to be conformably received in a longitudinally extending and outwardly opening slot **22** in the opposite sides of the concavo-convex insert **18**. The outer or convex surface of the insert is also longitudinally recessed or grooved at its opposite ends or edges **23** to conformably receive the sides **19** and **19a** as shown in Figs. 2 and 3, with each flange **21** conformably received within a slot **22** in the opposite ends or edges of the insert **18**. To accurately locate and align the bumper support **15** and position its upper end on the gunnel or upper edge of the boat, the support **15** is provided with a longitudinally extending and rearwardly projecting lip **24** adapted to seat on the upper edge.

In the embodiment of Fig. 2, the longitudinally spaced anchoring screws **17** have their threaded shank shown as extending through the gunnel **11** and anchored in a wood insert or block **25** mounted within the space provided between the gunnel and the adjoining portion of the boat **12**. In this form the bumper support **15** is shown mounted in a substantially vertical plane.

Fig. 3 shows the same bumper assembly **10** mounted in an inclined plane on the upper edge or gunnel **13** of a wooden boat **14** with the threaded shank of the attaching screws **17** anchored in the gunnel **13** and adjoining side of the boat **14**.

In the assembly of the bumper assembly **10** to either form of boat shown or to other boats to which it may be applied, the channelled support **15** is easily and quickly located by the lip **24** and anchored in operative position by attaching screws **17** in the manner shown. When the base **16** is so anchored, the relatively soft insert **18** is then applied to the support by compressing or flexing its opposite sides sufficiently to permit its compressed ends **23** to be inserted into the channel between the extended ends of the inturned flanges **21**. With the ends **23** inserted until they abut the base **16**, upon releasing pressure applied to the opposite sides of the insert permits the flanges **21** to enter the aligned slots **22** and the sides **19** and **19a** to locate in the aligned grooves on the exterior of the edges **23**.

With the insert or bumper **18** assembled in the manner shown in Figs. 2 and 3, it is securely retained by the inturned anchoring flanges or projections **21** and by the resiliency and flexibility of the plastic composition of which it is formed. The outer or convex surface of the flexible or yieldable insert **18** projecting a substantial distance beyond the gunnel or upper edge of the boat, provides optimum protection for the boat and any contacted object.

While excellent results have been obtained by forming the component parts of the bumper assembly **10** of a plastic composition, such as vinyl resin, other plastic compositions or combinations thereof, including polyethylene, natural or compounded synthetic rubber or similar plastic materials, may be employed.

Having thus disclosed the invention, I claim:

A bumper assembly for the gunnel of a boat consisting of a support of rigid plastic composition having a flat base, openings in said base to accommodate fastener means for attachment of the support to the gunnel of the boat, outwardly extending and converging flat sides of the support terminating in inturned straight flanges, said flanges being disposed substantially parallel to the flat base, one of said sides extending beyond the base to form

an aligned lip to locate the upper edge of the support along the upper edge of the gunnel, and an insert also of a plastic composition but providing a relatively soft, flexible bumper of concavo-convex shape with vertically spaced edges, each having a slot spaced from but adjacent its opposite end with each slot receiving one of said inturned flanges with said flanges retaining said insert in anchored operative position, said flexible bumper being recessed between each slot and its adjacent end at

the base so that the outer surface of said bumper and the outer surfaces of the sides and lip of the support form a substantially continuous convex curved surface.

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