United States Patent [19]

Fisher et al.

[11] **3,862,456**

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[54] **SAILBOAT BALANCE SEAT**

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[51] **Int. Cl.** **B63b 29/00**

[58] **Field of Search** ..... 114/39, 124; 9/1 R, 6, 9/7; 297/3, 108

[56] **References Cited**

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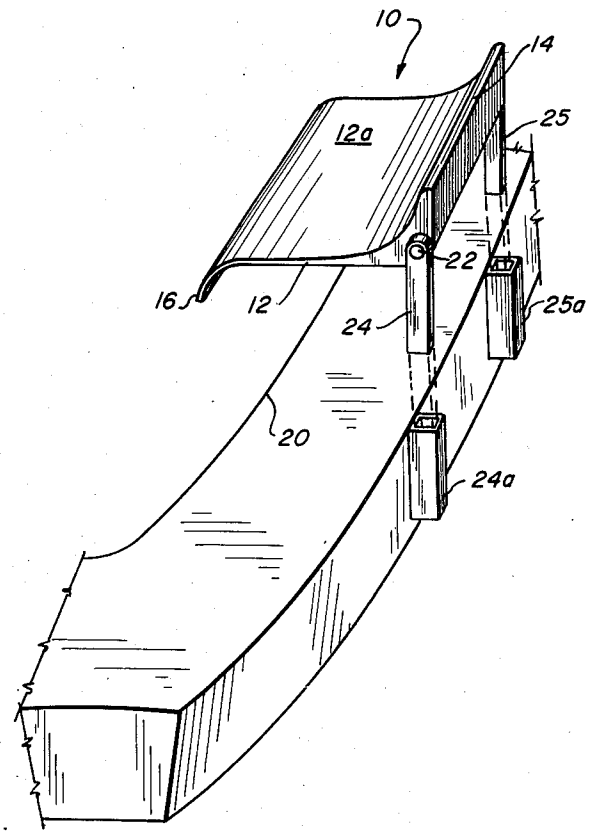
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[57] **ABSTRACT**

A generally shallow, S-shaped seat pivotally mounted on a gunwale of a sailboat from an inboard seating position to an outboard balancing position extending beyond the gunwale.

5 Claims, 3 Drawing Figures



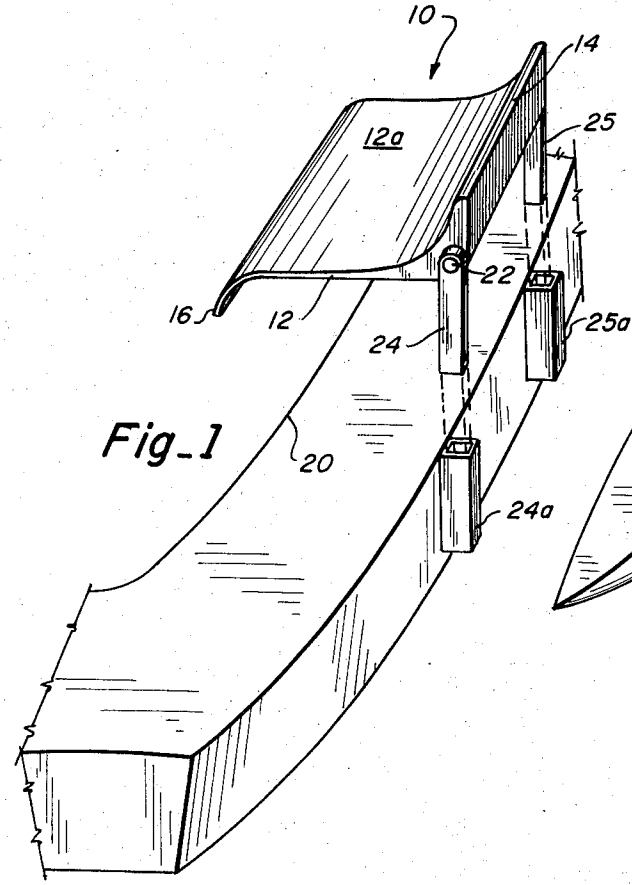


Fig_1

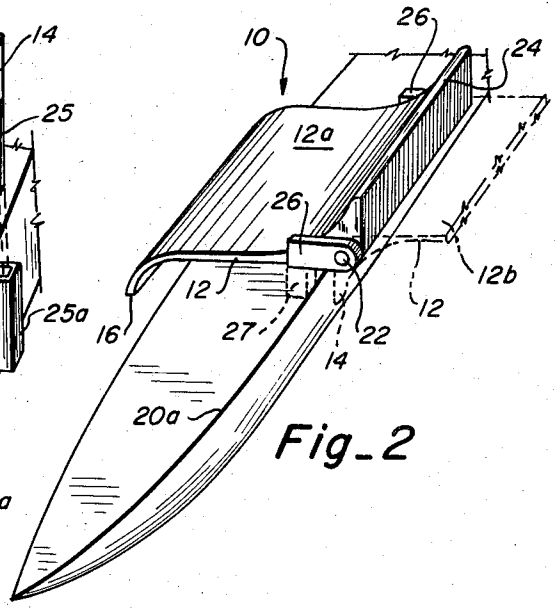


Fig_2

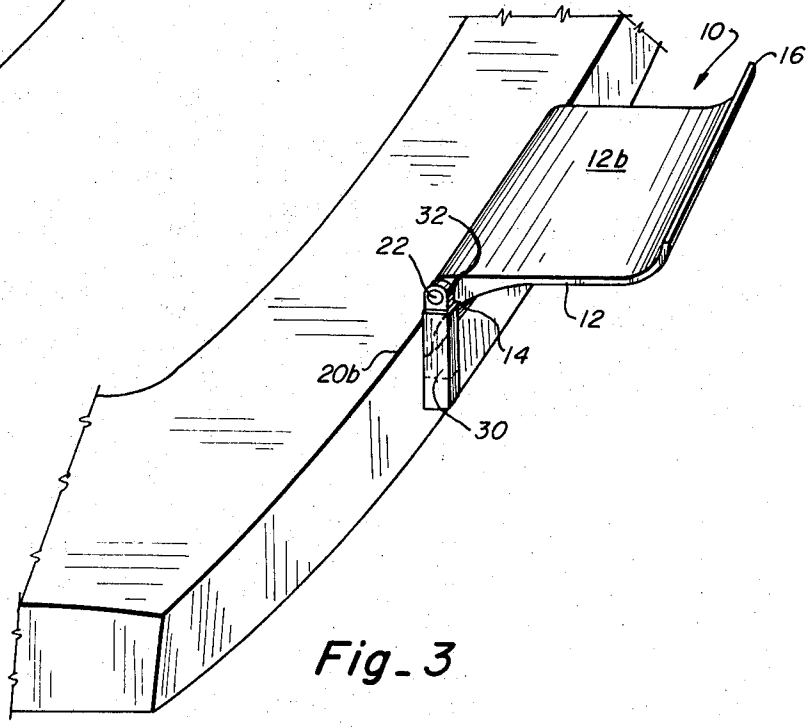


Fig_3

SAILBOAT BALANCE SEAT

This invention relates to balance or hiking seats for small sailboats.

In the art of sailing sailboats, particularly small sailboats, it is sometimes necessary to have the boat crew and/or passengers sit on or over the upside gunwale in a heeling boat to balance the force of the wind in the sails. In many instances, the balancing people must lean well over the side of the boat to provide additional balancing or ballast against the force of the wind in the sails. Obviously this activity has some inherent dangers, and a slip could mean a dunking or worse.

Various types of balancing or hiking means have been heretofore provided, including such things as sliding seats mounted on rails which extend outwardly over the gunwales, see U.S. Pat. No. 2,643,628, which includes pivotal rail means for a sliding seat, and U.S. Pat. No. 3,417,720, for laterally movable track means which move from either side of the boat to permit a hiking seat to move outwardly beyond either gunwale, and the well-known hiking straps which hang from the mast to permit the crew to stand on the boat side near the upside gunwale hanging on to the straps to provide balancing against the wind in the sails.

These devices are not entirely satisfactory for small sailboats which carry only one or two people. The small size of the boats generally can not support extensive and heavy equipment, and, generally, the balancing is limited to leaning over the upside gunwale of the boat.

According to the present invention there is provided a lightweight seat which is mounted on a gunwale and which is arranged to pivot from an inboard sitting position to an outwardly extending balancing position suitable for hiking or balancing against the force of the wind in a heeling boat. The seat is easily and quickly flipped from one position to the other, and it is sufficiently strong to resist any stress imposed on it by the balancing actions of the seat's occupant.

It is, therefore, included among the objects and advantages of the present invention to provide a seat for small sailboats mounted on a gunwale and pivotal from an inboard sitting position to an extending outboard hiking position.

Another object of the invention is to provide a comfortable seat pivotal from an inboard to an outboard extending position.

Still another object of the invention is to provide a pivotal hiking seat arranged for various attachments to a gunwale of a small sailboat.

Yet another object of the invention is to provide a lightweight seat supported at one side of a gunwale of a small sailboat and arranged to provide essentially the same configuration when positioned in either an inboard or an outboard extending configuration.

An additional object of the invention is to provide a pivotal hiking seat for small sailboats which is arranged for attachment to the gunwale of existing small sailboats.

These and other objects and advantages of the invention may be readily ascertained by referring to the following description and appended illustrations in which:

FIG. 1 is a perspective view of a hiking seat according to the invention illustrating one mode of attachment of the seat to a boat gunwale;

FIG. 2 is a perspective view of a hiking seat according to the invention illustrating a second mode of attachment of the seat to a boat gunwale; and

FIG. 3 is a perspective view of a hiking seat according to the invention pivoted to an outwardly extending balancing position from the gunwale of a boat.

In the device selected for illustration, a hiking seat, shown in general by numeral **10**, has a general shape of a flattened S and is arranged to be usable on either side, as explained below. The seat includes a generally planar body **12** having one surface **12***a* which is in the top position when the seat is in the inboard position and another surface **12***b* which is in the up position when the seat is pivoted to an outboard position. The seat includes a short leg **14** at one side of the planar surface **12** and another short leg **16** on the opposite side. In the inboard position the leg **14** provides a short back for the seat **12***a* and the leg **16** provides a turned under seat front for comfort. In the outboard position the leg **16** provides the back for the seat **12***b* while the leg **14** provides a stop against a boat gunwale **20***a*, as shown in FIG. **2**, or the boat gunwale **20***b* shown in FIG. **3**. The seat is mounted by means of a pivot pin **22** that extends through a lower portion of leg **14**, and the pivot pin **22** is mounted in various types of pivot pin supports, as shown in the various figures and explained below.

The seat support shown in FIG. **1** includes a pair of upright support members **24** and **25** formed as square tubes, arranged to telescope in tubular brackets **24***a* and **25***a*, respectively, which are affixed to gunwale **20**. These brackets extend upwardly to hold members **24** and **25** to provide pivotal movement of the seat about pivot pin **22** pivotally secured to the members **24** and **25**. This permits the seat to move from an outboard to an inboard position and vice versa. The uprights **24** and **25** may, however, be secured to the gunwale by other known means including screws, bolts and the like, but a temporary supporting arrangement is preferred. The upright brackets are shown as secured to the outside of the hull or gunwale, however, they may be positioned horizontally on top of the gunwale or in grooves or bores in the gunwale.

In the arrangement of FIG. **2**, the pivot pin **22** is mounted in angle brackets **26** each of which include a downward extension **27** arranged for temporarily extending into the bores in the gunwale **20***a*, and thus the brackets are supported in position for permitting the seat **10** to pivot around the pivot pin **22** which is securely held in the pivot support fixtures **26**.

In the seat support shown in FIG. **3**, a pair of tubular members **30** (similar to tubular members **24***a* and **25***a*) are secured to the gunwale in properly spaced position and a pivotal arm **32**, rotatably secured to the pivot pin **22**, extends into the tubes **30** to releasably support the seat on the gunwale **20***b*. While the tube is shown square, obviously it may be of any other configuration desired and the pivot arm **32** of course must correspond in general shape to the tube for telescoping therein.

The seat is used on a small sailboat by providing the fixtures for securing the seat pivotally to a gunwale and preferably it is arranged that the pivot near the outside edge of the gunwale so that the seat when pivoted inboardly will rest on top of the gunwale and support the seat for a passenger sitting on the side of the boat with the feet hanging in the cockpit. With the pivot pin near the outer edge of the gunwale the seat may be pivoted

to an outer position as shown in FIG. 3 so that the passenger or crewman may sit out beyond the gunwale and provide additional weight on the upside gunwale against the force of the wind in the sails. In either position the seat provides a short back which prevents sliding off the seat and provides some support for the passenger. The seat may be made of plastic, laminated plastic, for example, synthetic resin with a glass fiber filling, metal, wood, or any desired material which is light and provides sufficient strength to support a person sitting on the seat in the extended position. Generally, the seat is made as a one piece member. Further, the material should preferably be resistant to water. The pins and support fixtures are preferably of brass since they are resistant to water and particularly sea water, or other metal likewise resistant to water.

I claim:

1. A hiking or balancing seat for small sailing craft comprising a seat member having opposed upper and lower seating surfaces and short legs extending in opposite directions from opposed edges of said surfaces and each at an angle to the plane of said surfaces forming a back for each surface; pivot means at one of said legs of said seat; means for attaching said pivot means on the gunwale of a boat whereby said seat member may be pivoted from an inboard position providing a seat to an outboard extending position outwardly from the gunwale providing a seat; and stop means for said seat supporting it in one of said positions extending from the gunwale and the craft gunwale supports the seat in the opposite direction.

2. A seat according to claim **1** wherein one of said legs provides said stop means with the seat in an outward extending direction.

3. A seat according to claim **2** wherein said pivot means is positioned at about the intersection of one leg and said seat member.

4. A seat according to claim **1** wherein said pivot means is pivotally secured to the outer edge of a craft gunwale.

5. A seat according to claim **4** wherein said means for attaching said pivot means is removable from the gunwale.

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