

Feb. 23, 1971

W. L. BAHNE, JR

3,564,632

ADJUSTABLE SURFBOARD FIN HOLDER

Filed Oct. 17, 1968

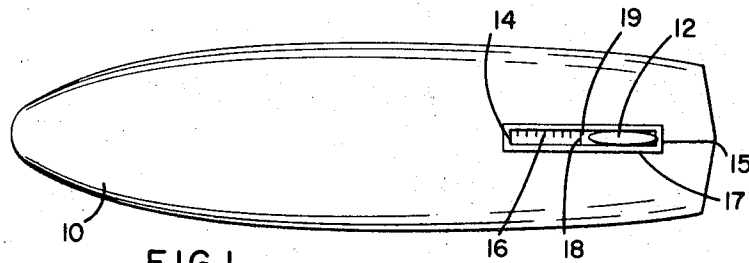


FIG. 1

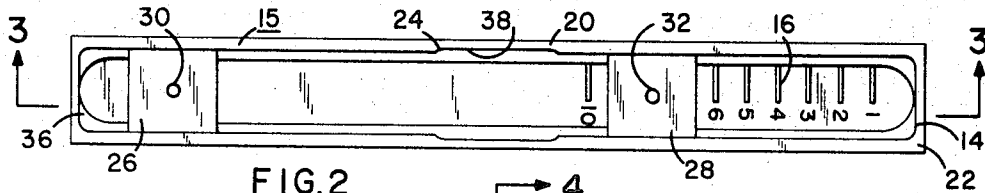


FIG. 2

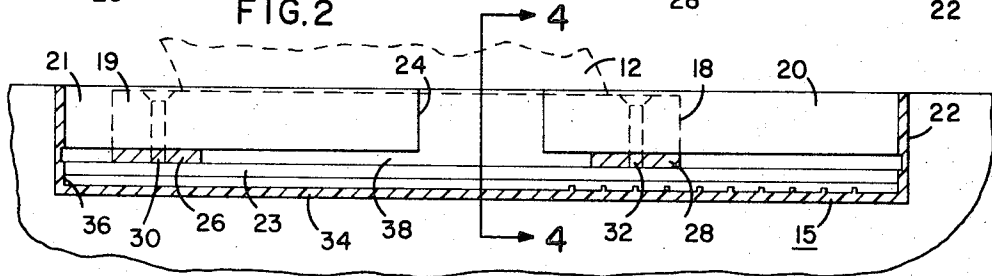


FIG. 3

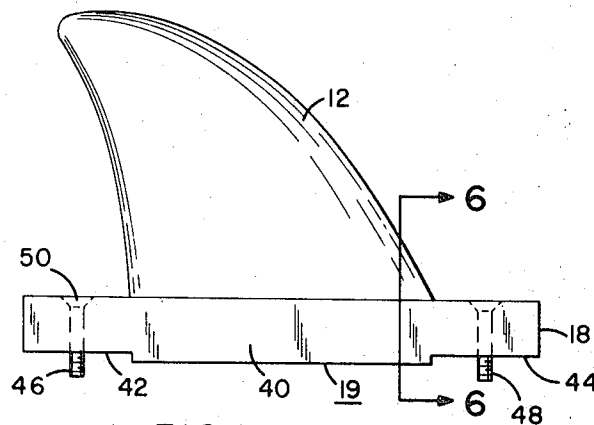


FIG. 4

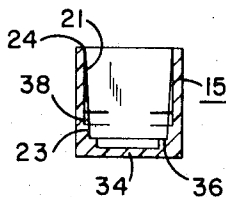


FIG. 5

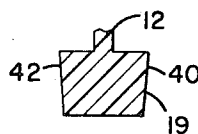


FIG. 6

INVENTOR.
WILLIAM L. BAHNE Jr.

BY

Carl R. Braun

ATTORNEY

1

3,564,632 ADJUSTABLE SURFBOARD FIN HOLDER

William L. Bahne, Jr., 3864 Strand Way,
San Diego, Calif. 92109

Filed Oct. 17, 1968, Ser. No. 768,253
Int. Cl. A63c 15/06

U.S. Cl. 9—310

9 Claims

ABSTRACT OF THE DISCLOSURE

An adjustable surfboard fin holder that provides infinite longitudinal positioning of the surfboard fin, within given limits, that allows the surfboard fin to be located in a secured position that is marked with indicia, to facilitate optimum surfboard handling.

BACKGROUND OF THE INVENTION

Surfing has become a major sport in many areas of the United States and foreign countries. Meets are now held on a National and International basis to judge the skill of individual surfers. Thus considerable skill has been developed by surfers in handling and controlling their surfboards.

A surfboard generally comprises a longitudinal board with a controlled fin positioned on the rear bottom surface. The fin is employed to control the direction and movement of the surfboard, through manipulation of the surfboard and the attached fin by the surfers feet and his balance on the surfboard. The surfboard in turning usually pivots around the fin. The longitudinal positioning of the fin is thus important in the handling of the surfboard. Since many factors are involved in effectively maneuvering a surfboard, such as its size, the weight of the surfer, the position of the surfers feet on the board, the type of waves encountered, and the position of the fin, it has been found that the fin position on a given surfboard for one surfer will not be an optimum fin position on the same surfboard for a different surfer. Thus it is very advantageous to be able to move the fin position longitudinally so that surfboard control for a given surfer can be optimized, normally through trial and error.

It is therefore advantageous to be able to adjust the position of the fin longitudinally on the surfboard, while still having a rigid connection of the fin to the surfboard that can withstand the forces exerted on the fin during surfing. Further it is advantageous to be able to infinitely adjust the longitudinal position of the fin within its holder so as to optimize the fin position relative to the surfer to achieve maximum and optimum results. With skillful surfers, it has been found that a movement as small at $\frac{1}{8}$ of an inch, can have a marked effect on the precision control of the surfboard.

SUMMARY OF THE INVENTION

In an embodiment of this invention, a rectangular shaped channel member is embedded in the underneath surface of a surfboard adjacent its aft end. The channel member has an opening on one side that is substantially flush with the under surface of the surfboard. A surfboard fin, having a longitudinal base member, fits into the open channel and is secured therein by fastening means. The fastening means are secured between grooves in the channel and the base member of the surfboard and are slidable in the grooves to afford an infinite adjustment in the longitudinal position of the surfboard fin relative to the surfboard, within the length of the channel member. The base member has a wedge shape that coacts with similarly inclined opposing longitudinal sides of the channel member, and is drawn into a abutting po-

2

sition by the fastening means that secures the base member in the channel and against movement therein, until the fastening means is released.

Thus the fin member is longitudinally moved within the channel member to a given position and is securely fastened in this position. Appropriate indicia marking in the bottom of the channel allows the position of the fin to be determined through alignment between the indicia markings and the front edge of the base member. The surfer is thus able to make educated adjustments of the position of the base member and thus correlate the exact position of the fin to the operational handling of the surfboard to establish optimum positioning through trial and error methods.

Therefore it is an object of this invention to provide a new and improved adjustable surfboard fin holder.

It is another object of this invention to provide a new and improved adjustable surfboard fin holder that allows infinite adjustment of the longitudinal position of the surfboard fin within the length of the fin holder, and that rigidly holds the fin in the new position during surfing.

It is another object of this invention to provide a new and improved surfboard holder that allows infinite adjustment of the longitudinal position of the surfboard fin with indicia for establishing the position of the fin.

Other objects and many attended advantages will become more apparent upon reading the following detailed description and an examination of the drawings wherein:

FIG. 1 is a top plan view of a surfboard with the adjustable surfboard fin holder positioned therein.

FIG. 2 is a top plan view of a holder for adjustably holding a surfboard fin.

FIG. 3 is a cross sectional view taken along lines 3—3 of FIG. 1.

FIG. 4 is a cross sectional view taken along lines 4—4 of FIG. 3.

FIG. 5 is a side view of a surfboard fin with a base support member.

FIG. 6 is a cross sectional view taken along lines 6—6 of FIG. 5.

Referring now to the drawing, a surfboard 10 having any desired configuration and length, has a fin member 12 mounted on a base member 19 that is held in a holder 15. It should be understood that the holder is a separate structure that is fitted into a recessed slot in the underneath surface of the surfboard 10. The holder 15 is secured in this position, with its upper surface flush with the underneath surface of the surfboard 10, in any known manner such as by plastic, resins or any other suitable known means.

The surfboard fin 12, see FIG. 5, has a relatively narrow cross section and may have any suitable fin shape. The integral base member 19 has a rectangular shape with sides 40 and 42 that incline inwardly, see FIG. 6. The preferable angle of inclination is approximately five degrees. This provides a wedge shape for securely holding the base member 19 in position in the holder 15, as will be described in more detail hereinafter. The holder 15, see FIGS. 2, 3, and 4, comprises a rectangular channel member having an opening at one side. The opposing longitudinal sides have downwardly inclined surfaces 21 that correspond with the angle of the wedge shaped sides 40 and 42 of the basemember 19. The opposing longitudinal sides also have longitudinal grooves 38 on each side that are aligned and parallel to receive opposite ends of the plate members 26 and 28. Thus it may be understood that the plate members 26 and 28 slide longitudinally in the respective grooves 38 to desired positions along the length of the holder 15. An inward shoulder 36 provides additional structure strength to the sides of the holder 15. Raised portions 16 on the bottom 34 of the

3

holder 15 are equally spaced to provide a measuring rule and have corresponding numbers that allow measured positioning of the fin 12. Opposing slits 24 in the opposite side of the holder 15, have a width slightly greater than the width of the plates 26 and 28 and have a depth corresponding to the depth of the grooves 38. The slots 24 allow movement of the plates vertically and out of the grooves 38. Each plate of plates 26 and 28 has a threaded opening 30 and 32 of receiving the threaded ends of bolts 46 and 48 that extend through vertical openings 50 in the base 19 of the fin 12. When tightened, the bolts 46 and 48 coact with plates 26 and 28 to draw the base member 19 and its wedged shaped cross section into engagement with the opposing sides of the holder 15.

In operation, the holder 15 is fixed in the surfboard 10 and the plates 26 and 28 are inserted in grooves 38 through slots 24. The fin 12 is placed in the opening of the holder 15 and bolts 46 and 48 are threadably engaged with the plates 26 and 28. The surfboard fin is then moved longitudinally in the opening of the holder 15 until the desired positioning of the fin 12 is established. This positioning may be determined by correlating the end 18 of the base member 19 with the markings 16 on the bottom 34 of the holder 15. The bolts 46 and 48 are tightened drawing the respective members together forming a wedge fit that holds the fin base in the secured position. Because of the wedge fit, the base member 19 can be separated from the sides of the holder 15 in a quick and easy manner by merely loosening the bolts 46 and 48 and pulling outwardly on the fin 12.

It may be understood that in operation of this invention the base member 19 and the integral fin 12 may be slidably positioned to an infinite number of locations between the ends of holder 15. Thus the surfer can adjust the position of the fin 12 relative to the surfboard 10 to any desired position, and yet can obtain a rigid interconnection of the fin 12 with the surfboard structure 10 that protects against sliding movement of the fin 12.

Having described my invention, I now claim:

1. A surfboard fin assembly comprising:
 - a fin support having opposing longitudinally extending interior sidewalls and an elongated channel partially defined by the interior sidewalls,
 - a pair of elongated side blocks defined by the interior sidewalls,
 - a pair of elongated notches formed in the interior sidewalls,
 - a retaining plate having a pair of marginal edges coupled in the notches,
 - a fin having a positioning tongue sized for insertion into the channel,
 - one of said tongue and said fin having an enlarged section arranged to engage the side blocks,
 - and a locking element coupled to the fin, wherein when the locking element is tightened the retaining plate and the enlarged section are urged towards one another to exert clamping force against the side blocks and prevent relative movement between the fin and fin support.
2. An adjustable surfboard fin holder for providing infinite longitudinal positioning of the surfboard fin within given limits comprising:
 - a surfboard fin having a longitudinal base member,
 - a rectangular channel member having opposing longitudinal sides for receiving said base member of said fin for being secured to the under surface of a surfboard,
 - each of said opposing sides having longitudinal grooves that are parallel,
 - releasable fastener means interconnecting said channel member with said base member for providing secured, longitudinal-positioning with infinite adjustment of said fin along the length of said channel member and the surfboard,

4

and said releasable fastener means including a pair of spaced plates with opposite ends positioned in said grooves for slidable movement in said channel member and bolt means for releasably securing said plates to said base member.

3. An adjustable surfboard fin holder as claimed in claim 2 in which:

said base member having a wedge shaped cross section, and said fastener means draws said wedge shaped base member into abutting contact with said sides to securely hold said base member in said channel member.

4. An adjustable surfboard fin holder as claimed in claim 2 in which:

each of said plates having a threaded opening there-through, and said bolt means projecting through holes in said base member and coacting with said threaded openings for drawing said base member into said channel.

5. An adjustable surfboard fin holder as claimed in claim 4 in which:

each of said sides having aligned slots with a width slightly greater than the width of each said plates and a depth substantially equal to the depth of said grooves, whereby said plates can be removed from said grooves through said slots.

6. An adjustable surfboard fin holder as claimed in claim 4 in which:

said base member having a flat lower surface with a recessed space at each end for receiving one of said plates, whereby said fastener means is capable of drawing said lower surface to a point adjacent to or below said grooves.

7. An adjustable surfboard fin holder as claimed in claim 2 in which:

the bottom surface of said channel having longitudinally spaced marks with indicia for coacting with one end of said base member and measuring the current longitudinal position of said fin relative to the surfboard.

8. An adjustable surfboard fin holder for providing infinite longitudinal positioning of the surfboard fin within given limits comprising:

a surfboard fin having a longitudinal base member, a rectangular channel member for receiving said base member of said fin for being secured to the under surface of a surfboard, and releasable fastener means interconnecting said channel member with said base member for creating frictional engagement of said longitudinal base member with said channel member providing secured, longitudinal positioning with infinite adjustment of said fin along the length of said channel member and the surfboard.

9. An adjustable surfboard fin holder as claimed in claim 8 in which:

said channel member having opposing longitudinal sides, said base member having a wedge shaped cross section for fitting between said opposing longitudinal sides, and said fastener means having means for drawing said wedged shaped base member into abutting contact with said sides to frictionally hold said base member in said channel member in a given position along the length of said channel member.

References Cited

UNITED STATES PATENTS

- | | | | | | |
|----|------------------------------------|--------|---------|-------|-------|
| 70 | 3,308,493 | 3/1967 | Lambach | ----- | 9-310 |
| | MILTON BUCHLER, Primary Examiner | | | | |
| | P. E. SAUBERER, Assistant Examiner | | | | |