July 23, 1963 S. W. STEIN ETAL 3,098,247

WATER CRAFT

Filed May 26, 1961

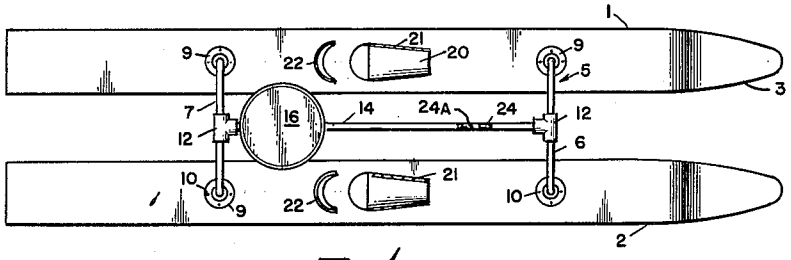


Fig. 1

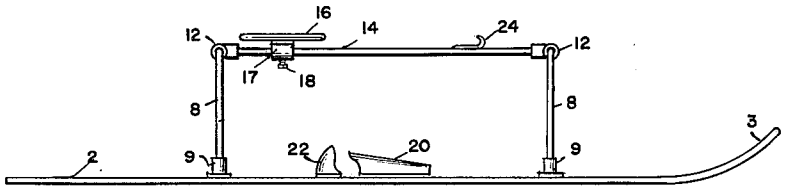


Fig. 2

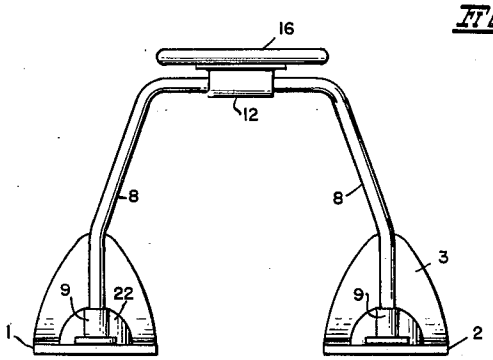


Fig. 3

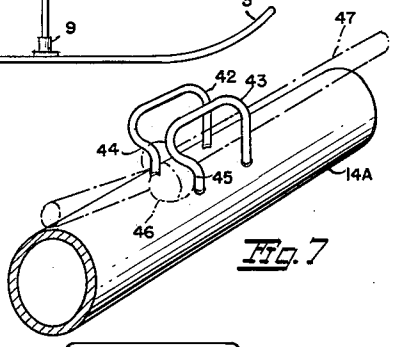


Fig. 7

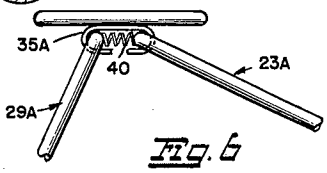


Fig. 6

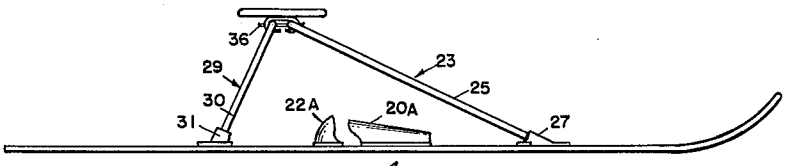


Fig. 4

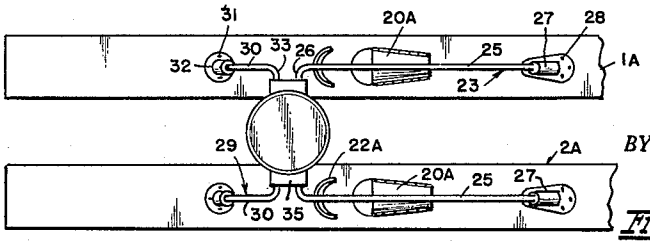


Fig. 5

SANFORD W. STEIN
JOSEPHINE STEIN
INVENTOR.

BY James K. Givnan
ATT'Y

United States Patent Office 3,098,247 Patented July 23, 1963

3,098,247

WATER CRAFT

Sanford W. Stein and Josephine Stein, both of Star Rte. W., Box 105, Tillamook, Oreg.

Filed May 26, 1961, Ser. No. 112,892
1 Claim. (Cl. 9—310)

This invention relates to improvements in water craft and more particularly to a craft designed for use in water skiing.

One of the principal objects of the invention is the provision of a water craft of the character described which comprises a pair of water skis rigidly interconnected in spaced apart parallel relation to each other by framework having a seat for a user superimposed thereupon and stirrups or bindings mounted on the skis for comfortable engagement with the feet of the user.

Another object of the invention is the provision of a water craft of the character described which because of the rigidly interconnected and properly spaced apart skis may be safely ridden and maneuvered by an inexperienced or unskilled novice in either standing or sitting position.

A further object of the invention is the provision of a framework as above described which is of simple, efficient, durable and inexpensive construction and readily adaptable to any and all known makes of water skis.

A still further object is the provision of means for attaching the craft to the tow-line or handlebar at the end of the line when desired to relieve the user of arm and hand strain resulting from sustained gripping of the handlebar under tension.

The foregoing and other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawing forming a part hereof and in which:

FIGURE 1 is a top plan view of a water craft made in accordance with our invention.

FIGURE 2 is a side elevational view of FIGURE 1.

FIGURE 3 is a rear elevational view of FIGURE 2 on an enlarged scale.

FIGURE 4 is a side elevational view of a modified form of the invention.

FIGURE 5 is a fragmentary top plan view of FIGURE 4.

FIGURE 6 is an enlarged fragmentary detail view of FIGURE 4 of a further modification, and

FIGURE 7 is a fragmentary perspective detail view of a line-attaching means.

With continuing reference to the drawing wherein like references of character designate like parts and particularly FIGURES 1–3 thereof reference numerals 1 and 2 indicate a pair of conventional water skis of flat formation substantially throughout their length and turned upwardly as at 3 at their forward end. The skis are rigidly secured in spaced apart parallel relation to each other as shown by a frame indicated generally at 5 and comprising forwardly and rearwardly spaced apart inverted U-shaped members 6 and 7 whose leg portions 8 are removably secured at their bottom ends to the top surface of the skis by internally threaded sockets 9 secured to the skis in any suitable manner such as by flush-head screws 10 or the like. The legs 8 of each frame are made separately and threadedly secured at their inner ends to T-fittings 12 which also serve to securely interconnect both frames by a longitudinal member 14.

The seat 16, preferably of round formation for safety purposes, is slidably adjustable lengthwise of the longitudinal member 14 by means of a tubular fitting 17 and lockable in adjusted positions by means of a set screw 18. Secured to each ski 1 and 2 forwardly of the seat

in the position shown is a stirrup or ski shoe 20 secured as at 21 to the ski and backed by a heel rest 22. A hook 24 is rigidly secured as at 24A to the longitudinal member 14 for convenience in attaching the craft to a tow line (not shown) or to a handlebar (not shown) at the end of the line when desired to relieve the user of arm and hand strain resulting from sustained gripping of the handlebar under tension.

In the modified form of the invention shown in FIGURES 4 and 5 we provide a forwardly and downwardly inclined U-shaped frame indicated generally at 23 and comprising leg portions 25 integrated with a transverse portion 26. The bottom end of the legs 25 are threadedly secured in upwardly and rearwardly inclined internally threaded sockets 27 secured as at 28 to the top surface of the skis 1A and 2A. Cooperating with the forward frame member is a rearwardly and downwardly inclined inverted U-shaped frame indicated generally at 29 whose legs 30 are similarly secured to upwardly and forwardly inclined internally threaded sockets 31 secured as at 32 to the skis. The transverse portion 33 of the rearward frame 29 and matching portion 26 of the forward frame are secured within a plate 35 of inverted C-shape in section by means of at least one pin 36 extending through the curved sides of the plate and through the transverse portions of both frame members. Ski shoes 20A and heel rests 22A are secured to the skis 1A and 2A in the same manner as in FIGURE 1.

In the further modification shown in FIGURE 6 we dispense with the pin or pins 36 and instead interpose a compression spring 40 between the top ends of the two frame members 23A and 29A. These leg members of both frames are of steel tubing and hence somewhat flexible. As a consequence thereof the top ends of the frames are slidable relative to each other within the confines of the plate 35A against the reaction of the spring 40 to provide a shock absorbing means for the seat and its occupant when the craft is travelling in rough water.

The modified form of line-attaching means shown in FIGURE 7 comprises two spaced apart identical cooperating brackets 42 and 43 welded at their bottom ends to the longitudinal frame member 14A with their rearward legs bent forwardly and downwardly as at 44 and 45 for engagement with a knot 46 at the trailing end of a tow line 47. In case of an upset, this knotted end of the line would be pulled away from the curved portions 44 and 45 of the brackets and the curved forward and rearward ends of the brackets would not present a hazard to the skier. The line may also be deliberately disengaged from the brackets when desired by an upward and rearward pull on the line.

While we have shown particular forms of embodiment of our invention, we are aware that many minor changes therein will readily suggest themselves to others skilled in the art without departing from the spirit and scope of the invention.

Having thus described our invention what we claim as new and desire to protect by Letters Patent is:

Watercraft of the class described comprising a pair of skis,

a forward frame and a rearward frame mounted upon the skis and securing the skis in parallel spaced relation to each other.

each of said frames comprising a pair of legs of flexible material secured respectively at their bottom ends to the skis and provided with transverse means at their top ends with the transverse means of one frame being spaced from the corresponding means

of the other frame in the direction of the length of the skis,

a plate of inverted C-shape engaging said spaced-apart transverse means of both of said frames,

a coil spring disposed within said plate and at all times bearing against said transverse means of both frames,

and a seat secured to said plate member whereby flexing of said leg members will be absorbed by said spring so as not to disturb the normal position of the seat.

References Cited in the file of this patent

UNITED STATES PATENTS

1,693,867	Reinwald	Dec. 4, 1928
2,762,063	Quinn	Sept. 11, 1956
2,950,923	Forney	Aug. 30, 1960

FOREIGN PATENTS

517,961	Canada	Nov. 11, 1955
17,699	Great Britain	A.D. 1900
167,761	Switzerland	May 16, 1934