Nov. 15, 1960 E. DE SANDER ET AL 2,959,796

SPORTSMAN'S ACCESSORY

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Fig. 1

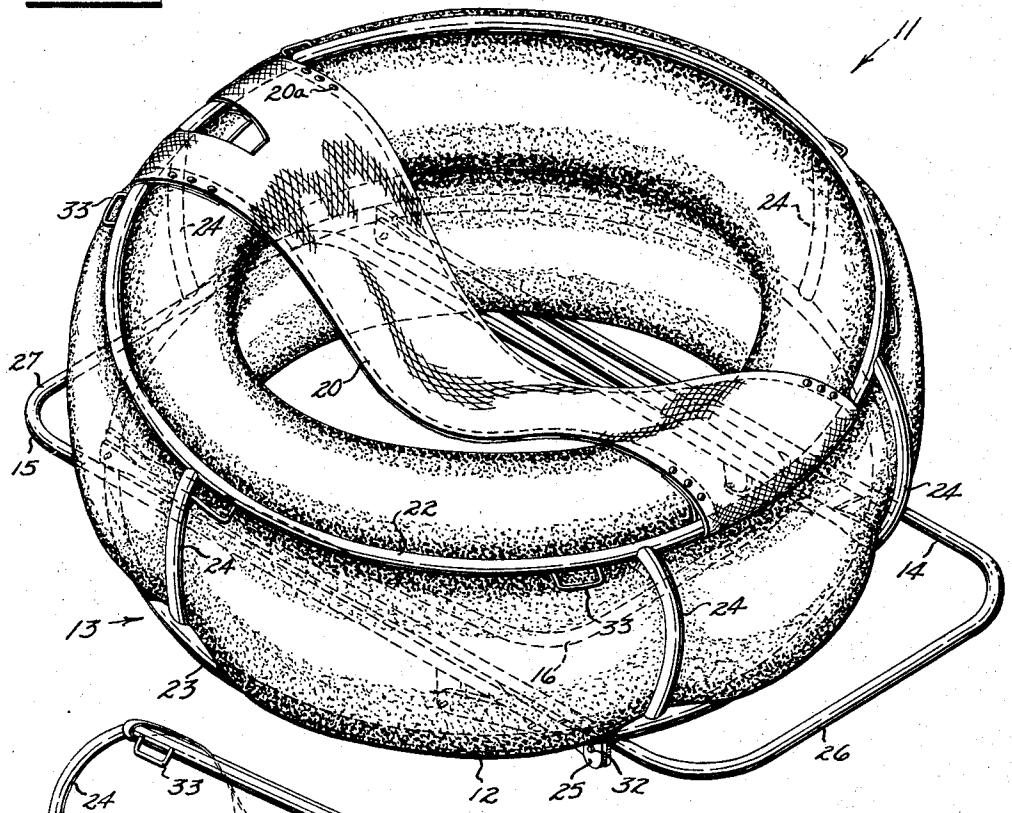
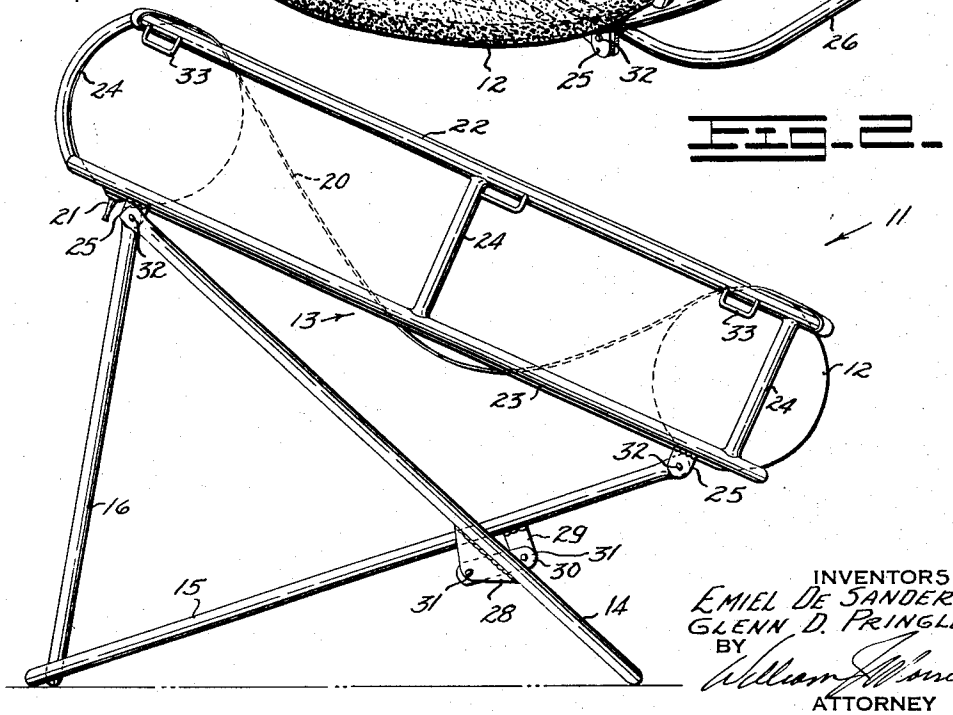


Fig. 2



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FIG. 3.

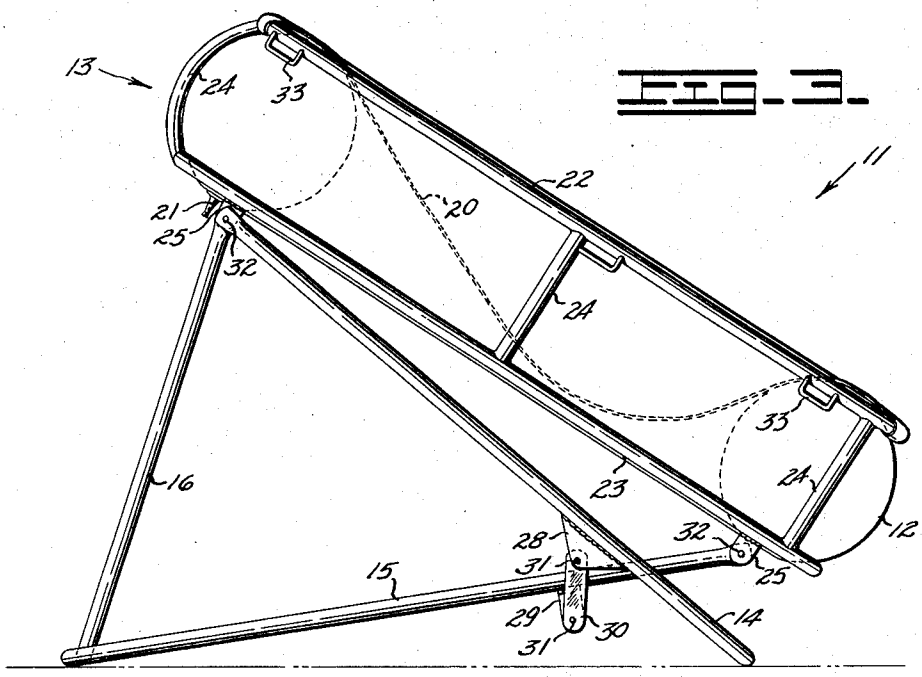
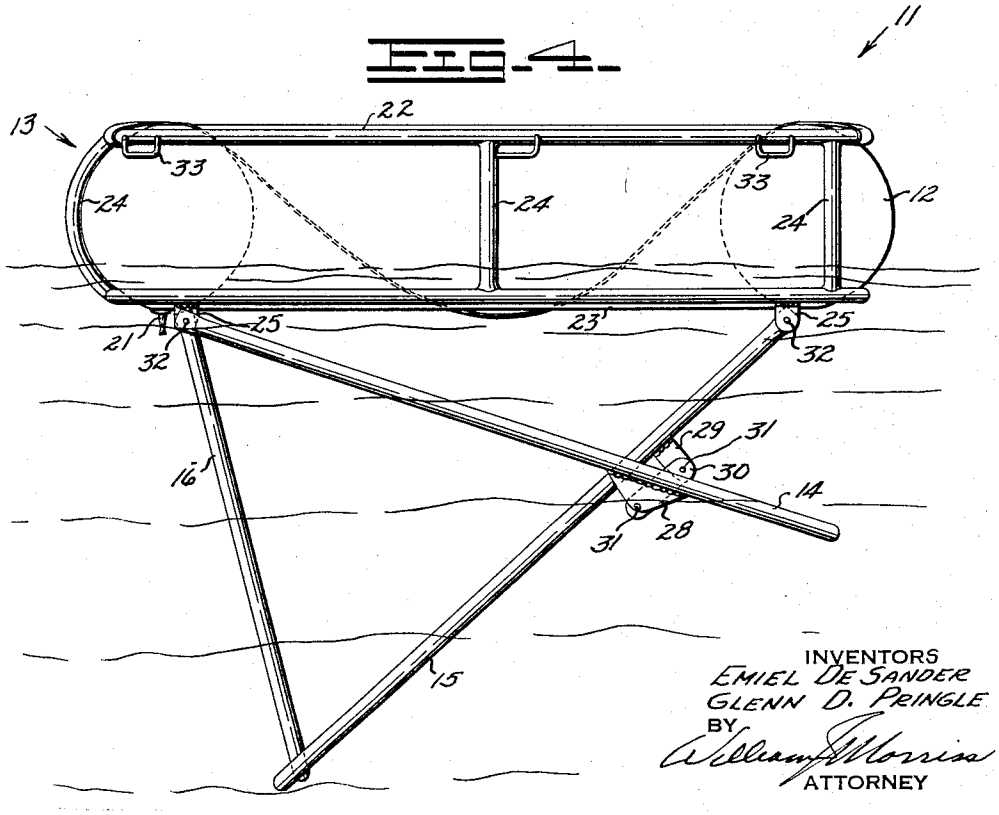


FIG. 4.



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Fig. 5.

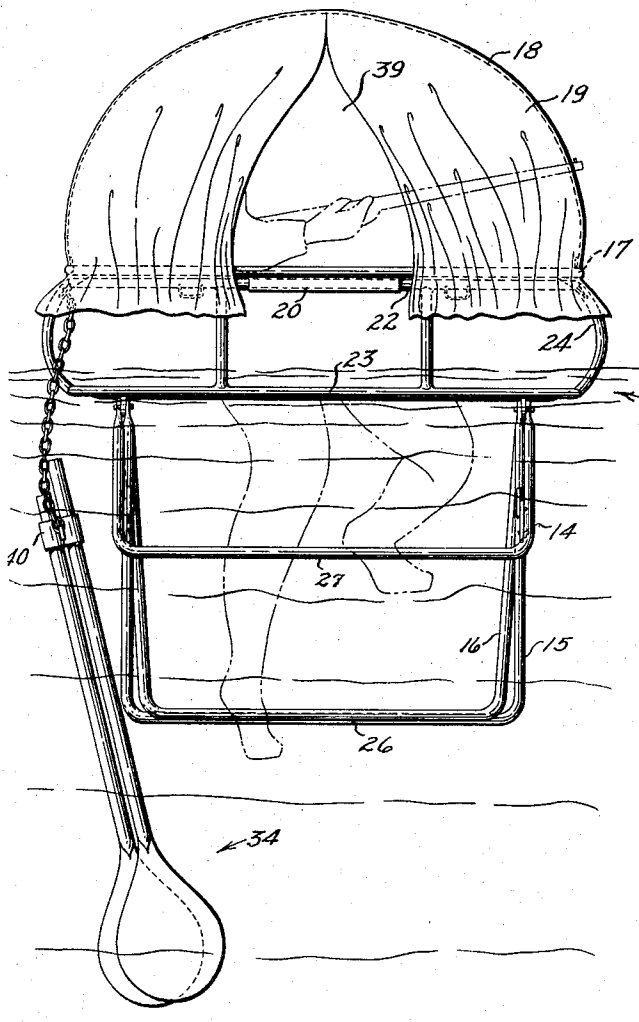


Fig. 6.

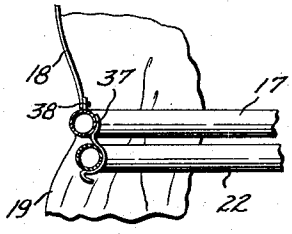


Fig. 8.

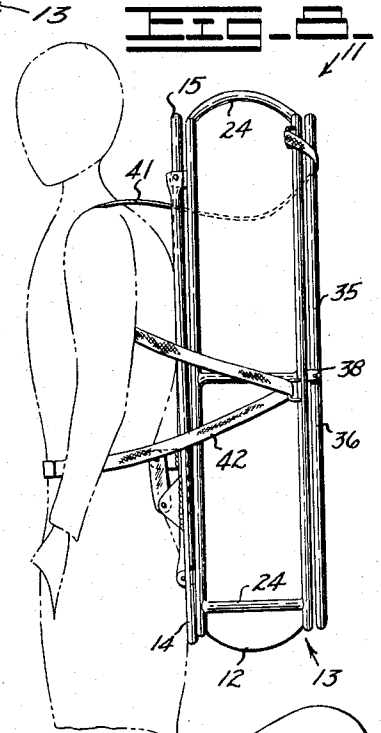
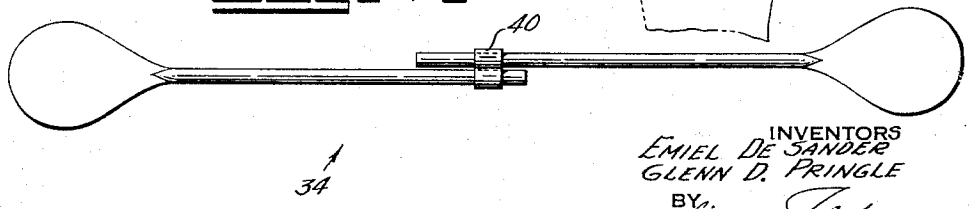


Fig. 7.



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SPORTSMAN'S ACCESSORY

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5 Claims. (Cl. 9—312)

The present invention relates to equipment for sportsmen and more particularly to a multipurpose combination of camp seat and portable craft for use in streams, lakes, rivers and the like and providing comfort with utility for campers, hunters, fishermen and like outdoorsmen.

The prior art has shown various inflatable and deflatable craft for use by sportsmen and the like. The prior art has also shown safety devices such as life rafts built with inflatable members. Such craft, while well known have never met with extreme success as a piece of all around sporting equipment. The cost of such structures has been relatively high and the versatility of such structures when out of the water has been extremely limited. Such devices have required tedious inflation and deflation making the structures poorly fitted for portability. Their construction has rendered them subject to snagging and punctures during portages and not easily adaptable to transport on the backs of hunters and fishermen, for example, or in vehicles such as automobiles. Many of the structures heretofore known have attempted to provide a boat-like device, and in so designing the device, the crafts have ridden extremely high in the water unless dangerously burdened with cargo. While riding high on the water, their stability has been adversely affected so that gunning or fishing from such craft is dangerous.

With the prior art clearly in mind it is among the objects of the present invention to provide a combination seat and portable craft accommodating only a single sportsman.

It is a further object of the present invention to provide a relatively rigid but light frame surrounding an inflated tube, which frame provides means for supporting the device on land in the manner of a comfortable camp stool with utility in the water to accomplish a stabilizing effect to the structure.

It is another object to provide a framed buoyant one-man craft wherein the framing comprises thin walled tubing which provides a structural base for supporting such accessories as might be required by sportsmen while allowing the accessories to be compactly collapsed for overland manual transport or vehicular transport.

Still another object is to provide a one-man sporting craft which is stable in the water and which adjustably accommodates a wide range of sizes of sportsmen, and in which stability is comfortably accomplished by reason of the riding position of the sportsman.

Other objects including simplicity and ruggedness of construction, ease of field repair, and standardization of structural components with attendant production economies will be more readily appreciated by sportsmen and the like as the description proceeds.

In the drawings:

Figure 1 is a perspective view of the inventive device, the legs in collapsed position and with the rubber tube inflated in the frame.

Figure 2 is a side elevation view of the portable craft of the present invention with the legs extended from the frame for use as a camp seat and illustrates one position possible by reason of the unique leg hinge.

Figure 3 is a side elevation view of the structure shown in Figure 2 where the legs are down to form a camp chair, but illustrates the lower position of the seat made possible by the leg hinge illustrated.

Figure 4 is a side elevation view of the structure in the water with the legs down as a leg or foot rest for hunters or fishermen while in the water.

Figure 5 is a front elevation view of the device of the present invention with the shroud in position on the auxiliary ring of the upper frame member to provide a shooting blind for sportsmen.

Figure 6 is a cross section elevation view through the upper frame member and the auxiliary and illustrating the clip which secures the auxiliary ring to the upper frame member.

Figure 7 is a plan view of the collapsible paddles utilized with the craft.

Figure 8 is a side elevation view of the craft completely collapsed and in carrying position on the back of a sportsman for portage.

General description

In general the combination sportsman's craft and camp seat comprises an annular tube of rubber or rubber-like material which is inflatable. The annular tube is preferably of heavy truck tire quality. The tube is cradled by a tubular framework which peripherally cradles the inflated tube, which framework gains stability by association with the inflated tube and lends structural strength to the craft for support of various other elements. As will be seen hereinafter the ready obtaining of a standard bouyant ring with simple modification of a standard inner tube component contributes immeasurably to the economy of the device. The two position hinged pair of selectively collapsible leg members are operably connected to the lower portion of the frame so as to provide, in the water a rest position for the sportsman's feet and on land to provide a comfortable and adjustable reclining camp seat. An adjustable transverse strap across the diameter of the tube and supported by the frame provides a comfortable straddle seat in the water and a body conforming seat bottom when the device is out of the water. The top portion of the tubular frame is adapted to accommodate the mounting of a shroud of sheet material such as canvas, plastic, or the like for selected use by sportsmen as a blind, sun and wind screen or the like. The shroud is supported by generally hemispheric braces allowing the sportsman ample unencumbered movement in the structure. The frame provides convenient holding area for various sporting accessories, and is provided with shoulder straps so that the structure comprises an excellent pack board frame for portage and overland transport. The center of the annulus provides adequate space for gear and equipment and the rigidity of the frame and overall lightness of the structure makes the device simple to carry.

In use, the device is fully inflated prior to reaching the stream or river and can be, when fully collapsed, easily stowed in any pleasure automobile with a maximum of efficient space utilization. The sportsman merely adjusts the device to his desired seating comfort and wades into the stream, river, or lake. Waders may or may not be used as desired by the individual. For duck hunting where the weather and water is anticipated to be cold it is obviously desirable to employ waders and heavy clothing. In some fishing conditions the waders are also recommended since the lower extremities of the body are likely to be immersed for a considerable period of time. In the summer or on the beach, for example, the structure will be more comfortable without the need

for waders. A substantial part of the body portion of the sportsman extends below the water surface so as to give a keel effect to the craft while lowering the center of gravity of the sportsman and craft. The collapsible leg members provide comfortable rail support for the feet of the fisherman or hunter. On emergence from the water, the device can be fully collapsed for transport leaving the rubber tube inflated in the frame or utilized as a camp seat adjusted to either selected sitting position.

Specific description

Referring more specifically to the drawings, and most particularly to Figure 1, the entire craft and chair **11** is comprised of the buoyant tube **12**, the frame **13**, legs **14** and **15**, and brace **16**. An auxiliary ring **17** is detachably secured to the frame **13** (Figure 5) and a yoke member **18** is pivotally connected across a diameter of the ring to provide support for the shroud **19**. A strap seat **20** is provided across the diameter of the frame **13** in spanning relationship.

The buoyant tube **12** is an annular structure of inflatable character having good strength and abrasion resisting qualities. An inner tube of desired size such as employed in truck tires has been found especially serviceable. The buoyant tube **12** is provided with a valve stem **21** for inflation, and the valve stem **21** is located so as to extend outwardly from the annulus formed by the tube **12**. This positioning is best illustrated in Figures 2, 3 and 4. The purpose of so positioning the valve is to avoid engagement with the sportsman employing the structure as either a water craft or chair as will be more readily appreciated as the description proceeds.

The frame **13** cradles the tube **12**. The frame **13** is made of two rings of substantially equal size, the rings providing an upper frame member **22** and a lower frame member **23**. These frame members **22** and **23** are of slightly smaller diameter than the inflated tube **12** and in the assembled structure confine the tube **12** and gain structural strength from their association with the tube **12**. Similarly, as will be appreciated, the tube **12** is reinforced as to rigidity by the frame **13**. A plurality of arcuate frame struts **24** curve outwardly from the frame members **22** and **23** to provide support for the frame **13**. The struts **24**, best illustrated in Figures 1, 2, 3 and 4, confine the tube **12** and integrate the entire frame **13**. The frame members are all formed from tubular material and by reason of the particular design of the structure the tubing material may be thin walled and relatively light. For example, thin walled electrical conduit tubing readily amenable to welding and brazing has been found excellent for the frame members.

Hinge lugs **25** having an opening therethrough are integrally attached to the lower frame member **23** and depend therefrom in spaced apart pairs. As will be seen, the lugs **25** provide a hinge connection for the legs **14** and **15** and brace **16** for connection to the frame **13**.

The legs **14** and **15** comprise U-shaped tubular members pivotally secured at their ends to opposite sets of hinge lugs **25**. As best seen in Figure 1, one set of the hinge lugs **25** are inset from the spacing of the other pair so that the entire leg structure is collapsible as shown to nest one pair within the other. The closed ends **26** and **27** of the U-shaped leg members **14** and **15** provide ground support when the structure is used as a camp chair and provide leg support to the sportsman for use in the water.

Each of the leg members **14** and **15** are provided with a pair of hinge brackets **28** and **29** through which an opening is provided. Hinge links **30**, each having openings in the two ends thereof connect the hinge brackets **28** and **29** to provide, as will be seen, a two position selective setting for the structure when used as a chair or water craft. The hinge links **30** and the brackets **28** and **29** provide a drop hinge intermediate the ends of the legs **14** and **15** which do not interfere with the collapsing of the leg portion of the structure but which do permit selective positioning. Suitable pivotal fasteners **31** retain the links **30** in association with the brackets **28** and **29**. The pivotal fasteners **31** may be bolts or rivets and the like. Similar fasteners **32** secure the upper ends of the legs **14** and **15** to the lower frame member **23**. In Figures 2 and 3 the selective positioning of the drop hinge is shown so as to change the elevational positioning of the chair in use.

The brace **16** is another tubular U-shaped member pivotal on one set of the depending lugs **25**, as best shown in Figures 2, 3 and 4 to brace the legs against collapse. Thus the brace **16** locks the structure into the position selected for use.

A plurality of cleat members **33** are provided to depend from the upper frame member **22** to provide equipment securing fasteners. In Figure 5, for example, one of the cleats **33** is employed for securing paddles **34** from loss. In similar fashion minnow buckets, fish stringers and decoys might be thus secured against loss. The seat member **20** is a relatively wide strip of canvas or like material which extends transversely across the opening provided by the annulus of frame **13** and tube **12**. Snap fasteners **20***a* provide adjustability for the seat and secure the seat **20** over the upper frame member **22**.

An auxiliary frame ring **17**, best shown in Figures 5, 6 and 8, and comprising a pair of opposite center hinged half sections or hemispheres **35** and **36** is provided to clip over the upper frame member **22**. Thus the ring member **17** mates with the upper frame member **22** and is selectively locked thereto. A plurality of clips **37** depend from the inside of the auxiliary ring **17** to snap under the frame member **22** and between frame member **22** and tube **12**. A clip **37** is best shown in Figure 6 showing its locking interrelationship between auxiliary ring **17** and frame member **22**. The hemispherical members **35** and **36** comprising the auxiliary ring **17** are pivotally connected at their ends. The pivotal connection **38** permits the ring **17** to be collapsed. The pivotal connection **38** also pivotally retains the yoke **18** so that the yoke **18** can be elevated to form a ridge member for the canopy or shroud **19** as best shown in Figure 5. The fabric or fabric-like material of canopy **19** is adjustably retained by the ring **17** to provide an opening **39** for shooting or the like.

The paddles **34** might be of any particular design but the paddles **34** as shown in Figure 7 and collapsed in Figure 5 are particularly convenient for use in the particularly described craft. The double ring link **40** locks both of the paddle elements together and provides a rigid interrelationship in use.

Shoulder straps **41** secured to the frame **13** provide simple carrying means and when the structure is carried as for portage, the space defined by the annulus provides a suitable storage for necessary gear in the manner of a pack board. The waist strap **42** provides additional carrying stability. The carrying position of the device is best shown in Figure 8.

While the buoyant tube **12** has been generally described as inflatable it will be appreciated that a more rigid buoyant annulus may be employed, as for example, a cork or tubular metal element. Similarly, the bouyant tube **12** may be filled with a foamed-in-place resin, and such modifications are intended to be included in the scope of the description and claims.

Operation

By reason of the tubular construction of the frame, leg members, and auxiliary ring the complete water craft and chair is extremely light and sufficiently compact to form a convenient portable and convertible structure for sportsmen. In camp the device provides a selectively positioned camp chair. On the steam or lake the device provides an excellent and stable water craft. The de-

vice comprises, with its auxiliary canopy and excellent blind and shooting cover for hunters and a serviceable sunshade for beach usage. The canopy may be colorfully decorated or may be suitably camouflaged, as desired. When overland transport is necessary the device serves admirably as a pack board (Figure 8) along with its full availability as a water craft and chair on the trail.

In the water, the leg members of the structure provide foot support as shown in Figures 4 and 5. In use the device has unusual stability making it amenable to the attachment of simple sail or motor. The rigidity of the structure makes the attachment of motor or mast and sail a relatively simple adaptation. The stability of the structure is achieved by reason of the relative rigidity of the device and the fact that in the water the immersion of a considerable part of the user provides an excellent keel effect. This is of particular importance in gunning for ducks and the like since other known structures lack stability for shooting. The device rides relatively low in the water since no pretense is made of providing a bottom in the craft. On beaches and around pools, the device is decorative as well as useful and it is extremely comfortable to a wide variety of anatomical types by reason of the adjustability of the seat and the resiliency made possible in the annular buoyant tube. As a shipboard accessory the device provides comfort as well as safety in that it is immediately convertible to water craft usage and serves well as a life ring. Other utilitarian aspects will be readily appreciated by sportsmen seeking such structures.

Having thus described the invention it is appreciated that many modifications within the skill of the art will occur to persons once familiar with the device, and such obvious modifications are intended to be included in the scope of the invention limited only by the scope of the hereinafter appended claims.

We claim:

1. A sportsman's accessory serving as chair and craft including: an inflatable buoyant annular tube; a thin walled tubular ring comprising an upper frame member; a thin walled tubular ring comprising a lower frame member; a plurality of short arcuate tube members spacedly supporting said ring members in parallel spaced relationship to form a frame peripherally supporting said tube and gaining support from contact with said tube; a straddle seat member supported by said frame and adjustably and transversely across the opening provided by

said annular tube; and a pair of tubular hinged legs collapsibly secured to said frame and selectively positionable by a user, a shroud, and a pair of hemispheric bow supports pivotal to and in collapsed register with said upper ring member for selective support of said shroud.

2. In a structure as claimed in claim 1 and wherein said shroud is a tent-like shroud member collapsibly attached to said frame for providing a shelter or canopy over the entire structure.

3. In a structure as claimed in claim 2 wherein said shroud-like member comprises a hinged hemispheric ring support and a mating auxiliary ring base overlying and in register with the upper of said frame members spring clips removably securing said auxiliary ring base to said upper frame member and in register therewith; and a selectively closable sheet of water repellent material over said ring support and ring base.

4. A stable craft rendered so by the cooperation of its inherently flimsy and non-rigid cooperating elements, comprising: a pair of spaced apart thin wall tubular metal rings; spacers connecting said metal rings and together with said rings defining therebetween a cradle for an annulus; a canvas seat strap secured to the uppermost of said rings and extending transversely across the opening defined by said ring; a tubular and annular inflatable member expandable into and supportably contacting the cradle formed by said tubular rings and said spacers; three U-shaped members in articulated hinged relationship selectively pivotal and dependably extendable from the lowermost of said rings and collapsible flatly against said lowermost ring.

5. In a craft as set forth in claim 4 wherein said articulated hinged relationship comprises a cross link pivotal from each of a pair of said U-shaped members.

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