March 10, 1964 L. CEFALO, JR 3,123,840

PORTABLE COLLAPSIBLE BOAT

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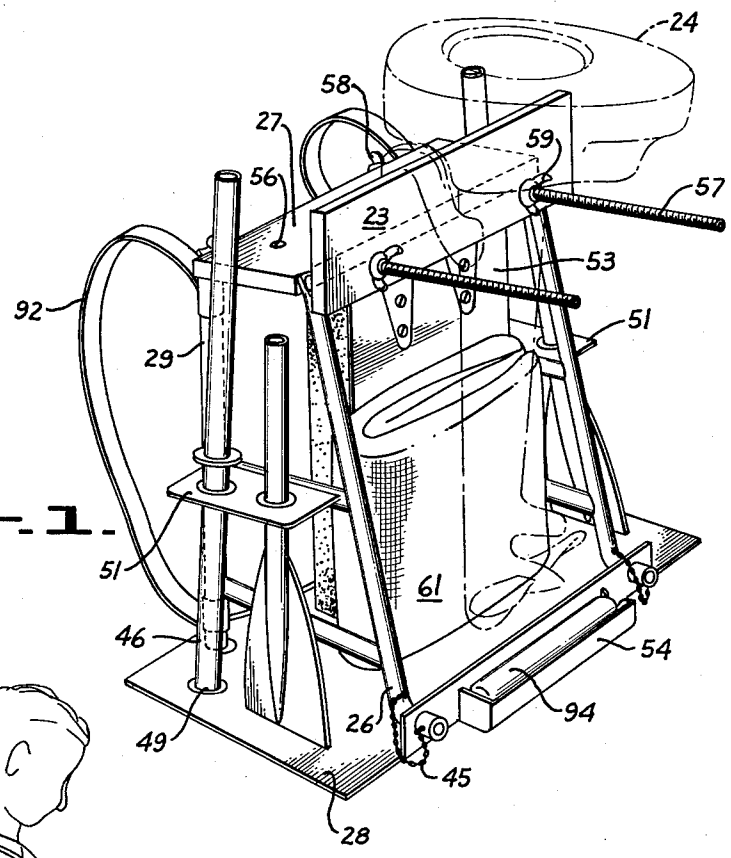


FIG. 1.

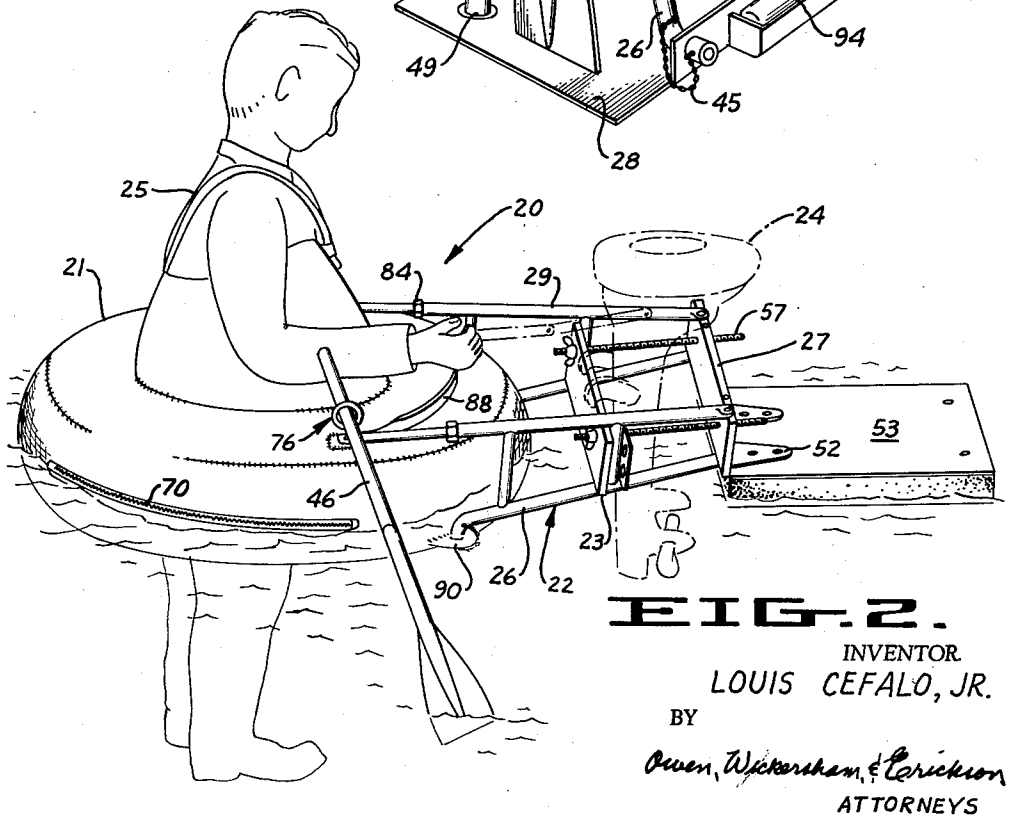


FIG. 2.

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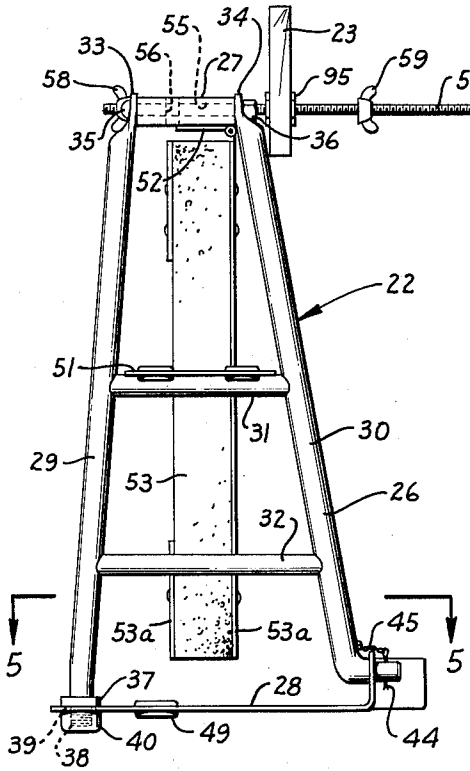


FIG. 3.

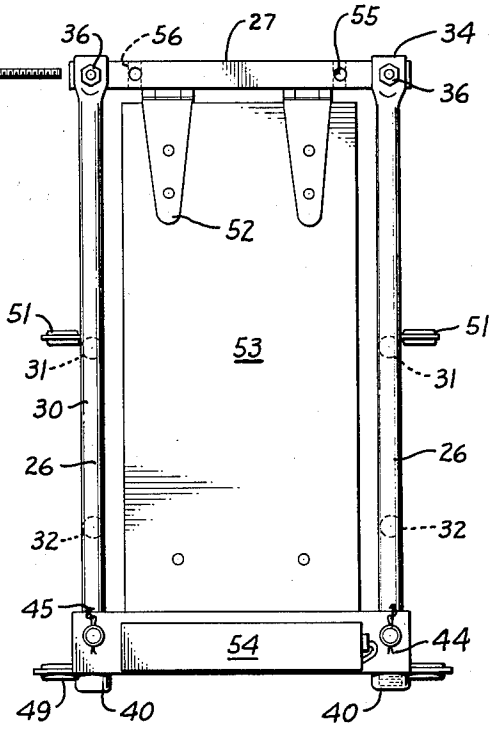


FIG. 4.

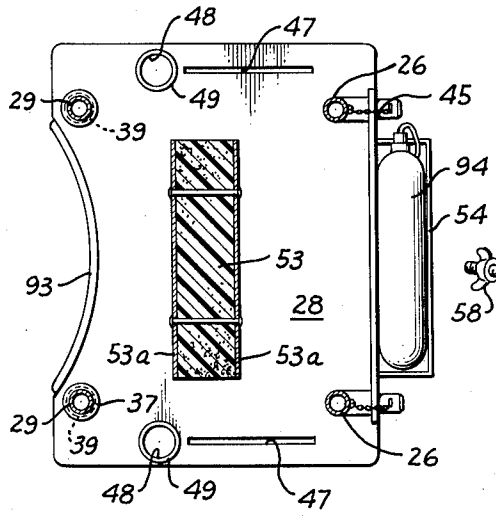


FIG. 5.

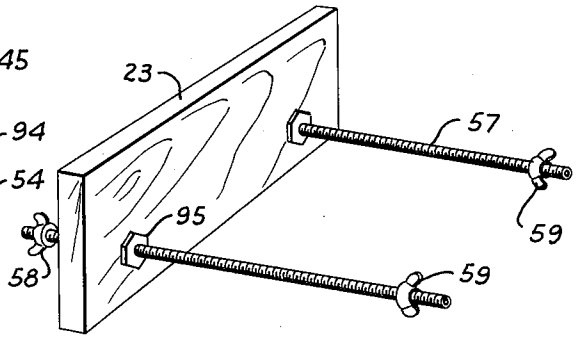


FIG. 6.

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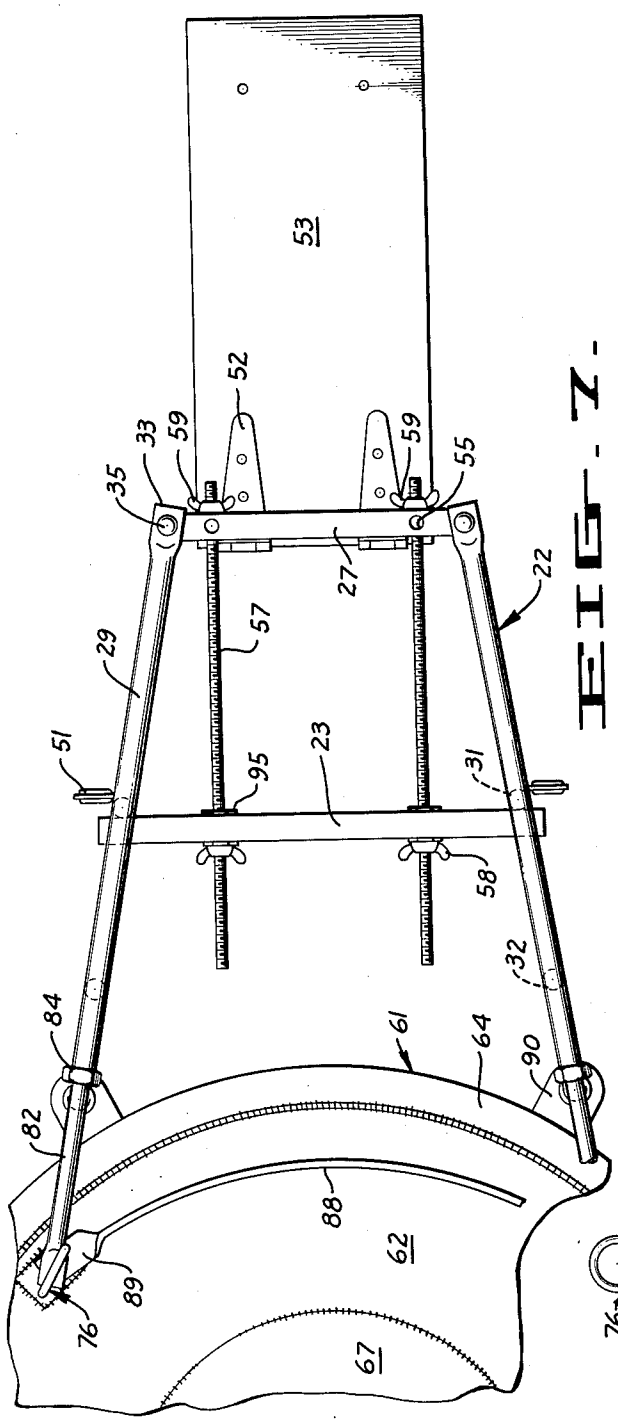


FIG. 7.

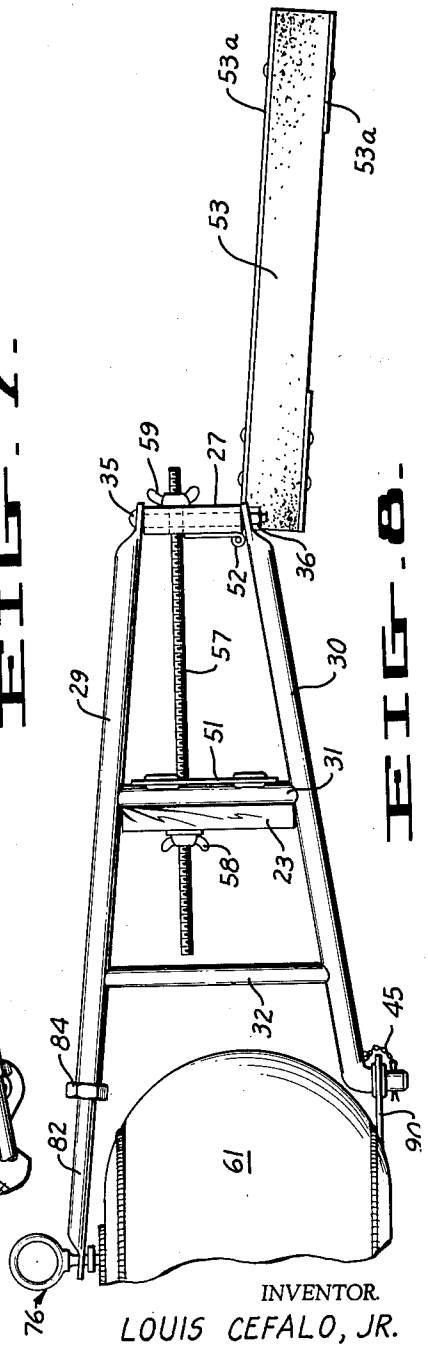


FIG. 8.

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PORTABLE COLLAPSIBLE BOAT

Filed April 9, 1962 4 Sheets-Sheet 4

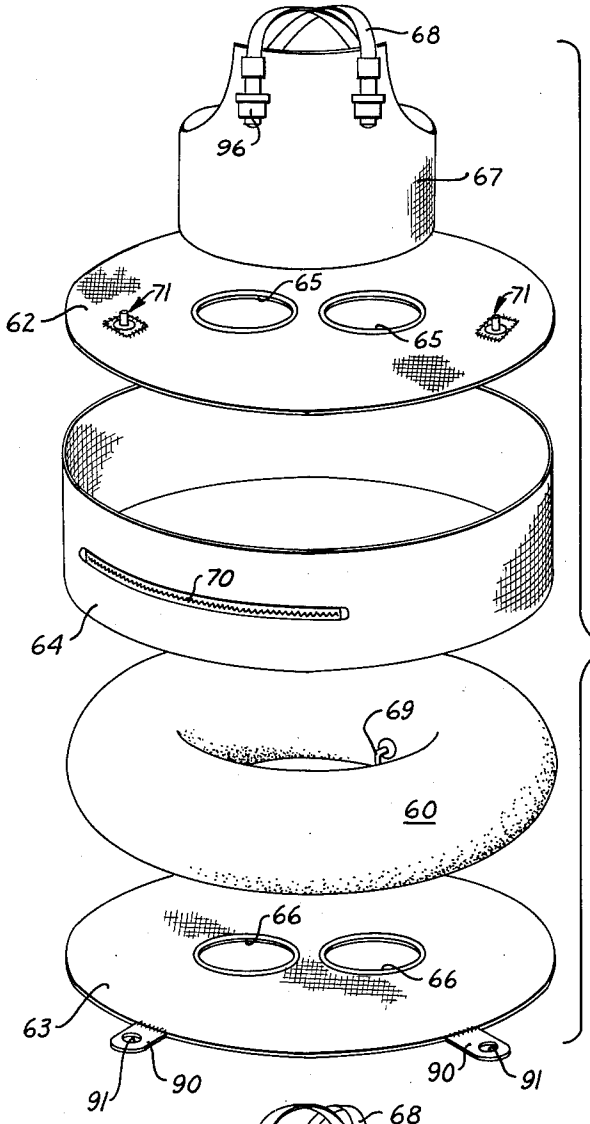


FIG. 9.

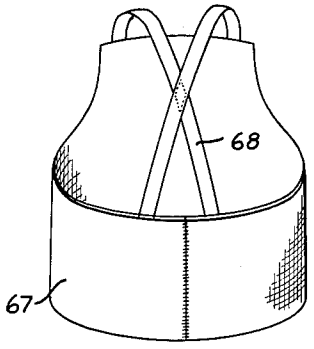


FIG. 11.

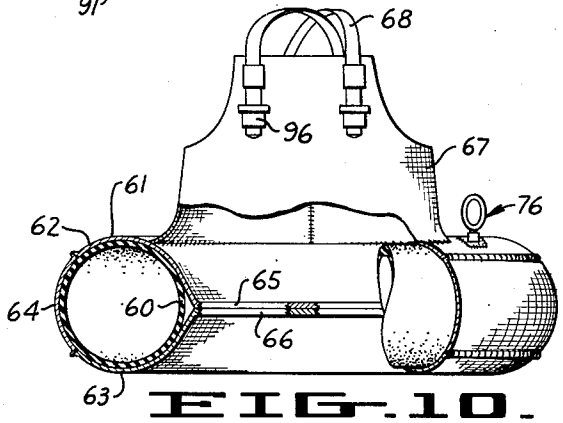


FIG. 10.

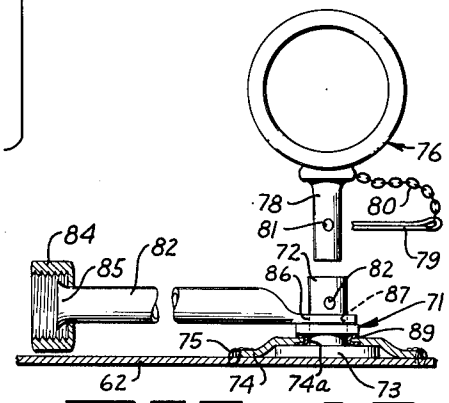


FIG. 12.

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3,123,840
Patented Mar. 10, 1964

3,123,840

PORTABLE COLLAPSIBLE BOAT

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Filed Apr. 9, 1962, Ser. No. 186,117
14 Claims. (Cl. 9—2)

This invention relates to collapsible inflatable boats for outdoorsmen, and more particularly it relates to such a boat capable of supporting an outboard motor and yet readily transportable to remote lakes and rivers.

To many an outdoorsman great satisfaction and enjoyment is derived from exploring, hunting, or fishing on waters located in remote areas that are inaccessible to roads or to normal mechanized modes of transportation. Usually such remote lakes and rivers can be reached only on foot and often over steep trails. Yet many such bodies of water are relatively large and in order to travel over them at a reasonable rate of speed and without taxing the strength of the passenger, some mechanical power such as an outboard motor is required to propel the boat. Although rubber boats and rafts of various types are well known in the art, none of them prior to my invention fulfilled this need for a collapsible motor-driven boat capable of being arranged in knock-down form so as to be easily carried by one person. One important object of my invention is to solve this problem.

Another object of the present invention is to provide a collapsible inflatable raft having means for supporting an outboard motor that, when disassembled, can be arranged in a light compact pack that can be carried on the back of a person.

More specifically, another object of the invention is to provide an inflatable raft or boat in combination with a prefabricated frame structure for the boat that can serve a dual purpose of supporting an outboard motor in a position for propelling the inflated boat and as a carrying rack for the disassembled and deflated boat components and the outboard motor that can be readily worn on a person's back.

Still another object of my invention is to provide a one-man inflatable boat in combination with an outboard motor that will retain in a stable buoyant attitude in the water even when the motor is operated at different power settings.

Another object of my invention is to provide an auxiliary buoyant means for an inflatable collapsible, motor-driven boat that extends aft of the motor when the boat is in the water and which retracts when the boat is disassembled for carrying.

A further object of the present invention is to provide a portable, collapsible boat for sportsmen utilizing an inner inflatable tube with a covering of flexible material having means for supporting a motor-mounting frame that is extremely strong and durable.

Another important object of my invention is to provide an inflatable, collapsible one-man boat that can be propelled by a small outboard motor or by hand operated oars and which is particularly adaptable for ease and economy of manufacture.

Other objects, advantages and features of my invention will become apparent from the following detailed description of one embodiment thereof, presented in accordance with 35 USC 112.

In the drawings:

FIG. 1 is a view in perspective of a portable, collapsible motor powered craft embodying the principles of the invention shown in knocked-down form and mounted on the combination carrying rack and motor support frame;

FIG. 2 is a view in perspective of the craft shown in FIG. 1 as it appears when inflated and in use with the carrying rack now arranged to serve as a motor support according to the invention;

FIG. 3 is a view in side elevation of the motor support members for the collapsible, inflatable boat of FIGS. 1 and 2, shown when connected together to form the frame for carrying the deflated boat and motor;

FIG. 4 is a view in front elevation of the carrying rack frame of FIG. 3;

FIG. 5 is a plan view in section taken along the line 5—5 of FIG. 3;

FIG. 6 is a view in perspective of the motor support block associated with the motor support frame;

FIG. 7 is a fragmentary plan view of the collapsible raft with the combination motor support frame and carrying rack according to the invention, with the craft inflated and the motor support attached thereto;

FIG. 8 is a fragmentary view in elevation of the boat and motor support frame shown in FIG. 7;

FIG. 9 is an exploded front view in perspective showing the principal components of the inflatable boat according to the invention;

FIG. 10 is a front view in elevation and partly in section of the assembled inflatable boat according to the invention with the motor support removed therefrom;

FIG. 11 is a rear view in perspective of the vest portion of the inflatable boat assembly;

FIG. 12 is an enlarged view in elevation and in section showing details of the oarlock members and motor support connection to the boat.

General Description

In FIGS. 1 and 2 a collapsible, portable boat 20 according to the invention is shown in two basic arrangements of its components illustrating how the entire assembly can be carried in knock-down form by a person into remote areas and how it can be used when assembled and inflated. The invention comprises generally two major components, namely an inflatable boat or raft 21 and an attachable frame 22. In FIG. 1 the raft 21 is deflated and folded for carrying on the support frame 22, which in this instance is serving one of its dual functions as a pack rack that a person can readily carry on his back. Attached to the support frame 22 near its upper end is a motor mounting block 23 to which is temporarily fastened a small, light outboard motor 24 of any suitable type readily available on the market. FIG. 2 shows the invention as it appears when in actual use with the raft 21 inflated and the motor support frame 22 extending therefrom supporting the outboard motor 24 for propelling the raft and its passenger 25.

The Support Frame 22

An important feature of the present invention is the support frame 22 which serves both as: (1) a carrying rack that will readily fit on a person's back while retaining all of the components of the collapsible boat assembly 20 including the motor 24; and (2) as a means for attaching the motor 24 in its proper position on the raft 21 for propelling it through the water. FIGS. 3–5 show the support frame 22 as it appears when being used as a

pack rack frame for the deflated raft 21 and the motor 24. Generally it comprises a pair of A-shaped side frame members 26 that are connected together permanently by a relatively narrow support member 27 at their upper end and a removable sheet metal base member 28 at their lower ends. Each of the side frame members 26 is composed of an upper longitudinal member 29 and a lower longitudinal member 30 connected by cross members 31 and 32. All of the members 29–32 are preferably formed from thin walled aluminum material that is strong but light in weight. Each of the longitudinal tubular members 29 and 30 have flattened end portions 33 and 34 at their upper ends which are attached to the support member 27 by bolts 35 extending through these end portions that are retained by a locking nut 36 near its lower end. Each upper tubular member 29 has a fixed collar 37 adjacent a threaded portion 38 extending to its end. The threaded portion 38 is adapted to extend through an opening 39 in the base member 28 and is secured on the underside thereof by a threaded sleeve 40 or some suitable cap device. The lower longitudinal members 30 of each frame member 26 have outwardly bent portions 41 at their lower ends which are adapted to secure these members in both of its operational positions as a carrying rack and as an outboard motor support on the inflated raft 21. In the carrying rack configuration the end portions 41 fit within spaced apart openings 42 in an upturned flange 43 on the base member 28. Locking pin members 44 attached by a small chain 45 near the lower end of each of the lower longitudinal frame members 30 may be placed through holes near the ends of the outwardly bent lower end portions 41 to keep them from accidentally pulling away from the flange 43 of the base member.

Mounted along the rear edge of the base member 28 and adjacent the flange 43 is an outwardly extending bracket 54 adapted to retain a bottle of compressed CO_2 94 which may be used to inflate the raft 21. On its opposite front edge 93 the base member is curved inwardly so that it will fit comfortably against the person's back when the disassembled boat 20 is being carried.

As shown in FIGS. 1 and 2, even though the boat or raft 21 is normally powered by the outboard motor 24 according to the invention, a pair of metal oars 46 may be carried as an additional means of propelling it. The oars 46 are preferably of a light tubular metal material and are in two connectable pieces *46a* and *46b*. To accommodate the oars 46 when the boat assembly is in knock-down form and is being carried as a back pack, the base member 28 is provided with a pair of slits 47, to receive the flat ends of the oar sections *46a* and a pair of circular openings 48 for retaining the other oar portion *46b*. At their upper ends, when stowed on the support frame 22, the oar sections *46a* and *46b* are retained in a pair of openings 49 and 50 in a sheet metal bracket 51 attached across the frame members 29 and 30. All of the openings 49, 50, and 51 are provided with rubber grommets so that the oar members *46a* and *46b* when stowed will be rigidly secured.

The upper support member 27 of the frame structure 22 is preferably made from a suitable plastic or hardwood material and attached to it by means of a pair of hinges 52 is a movable auxiliary buoyancy member 53, that provides an important feature of my invention. As shown in FIG. 3, the buoyancy member folds inwardly and extends downward between the frame members 26 when the support frame 22 is being used as a carrying rack. However, as shown in FIGS. 7 and 8, when the raft 21 and motor support frame 22 are assembled for use on the water, the buoyancy member 53 is swung outward by means of the hinges 52 so that it trails behind the motor 24 and provides a means for keeping it at the proper depth and the raft 21 properly leveled and stabilized in the water. The buoyancy means 53 may be made from any suitable light but strong material so that its overall weight is less than an equal volume of water. For this purpose I prefer to use a block of foamed plastic such as polystyrene which is both light and strong and will not absorb water. To the upper and lower surfaces of the block 53 I may attach relatively thin protective sheets *53a* of a rigid plastic or plywood material connected by bolts through the block 53, and which also serve as a means for anchoring the hinges 52 to the foamed plastic material.

Aside from supporting the buoyancy member 53, the upper frame member 27 also functions to retain the water mounting block 23 in two different positions. The frame support member 27 is provided with a first series of bolt holes 55 that are spaced apart and extend through its width and a second pair of bolt holes 56 that extend through the thickness of the support member 27 at substantially right angles to the first pair of bolt holes 55. The first set of bolt holes providing a means for connecting the mounting block 23 to the support frame 22 when the boat 20 is being carried in knocked-down form on a person's back, and the second pair of bolt holes 56 are used to connect the mounting block 23 to the support frame 22 in a different position to hold the motor 24 when it is mounted for propelling the inflated boat 20.

The motor mounting block 23 shown in FIG. 6 is preferably a rectangular shaped member of a suitable rigid material. Attached to it are a pair of spaced apart threaded stud members 57 which extend through the thickness of the mounting plate 23 and are held in place thereon by a pair of nuts 95. The studs 57 are provided with wing nuts 58 and 59 at both ends. When the motor 24 is to be positioned for propelling the craft 20, the mounting block 23 is placed behind the cross members 31 and between the pairs of longitudinal members 29 and 30. In this position it is fixed rigidly to the frame support member 27 by means of the studs 57 which extend through the bolt holes 56. When the wing nuts 58 and 59 are taken up at both ends of the studs 57 the mounting block 23 is thus held firmly in position on the frame 22 as shown in FIG. 2. When the frame structure 22 is used as a carrying rack as shown in FIG. 1, the mounting block 23 is retained against the rear edge of the upper frame member 27 with the stud members 27 extending through the holes 55 and secured by the wing nuts 58 and the fixed nuts 95. The ends of the studs 57 which extend rearward of the member 27 serve as a protective means for the motor 24 mounted between the studs.

The Inflatable Raft 21

The details of construction of the inflatable raft portion 21 of my invention are shown in FIGS. 9–12. My boat 20 is constructed so that it will easily support one individual, in addition to the motor 24. As shown in FIG. 2, it is expected that the person supported in the boat 20 will normally wear waders or some other well known form of waterproof clothing below his waist since in the form of the invention illustrated, his legs will extend below it. The various components of the raft 21 are shown in the exploded view of FIG. 9. Generally, the inflatable portion of the boat comprises an annular rubber inner tube 60 having good strength and abrasion characteristics. An inner tube of desired size similar to the type used for large truck tires has been found especially serviceable. The tube 60 is retained within a prefabricated flexible cover 61 that not only protects the tube 60 from punctures but also provides a supporting means for retaining the ends of the support frame 22. The protective cover 61 for the inner tube 60 is formed from some suitable flexible sheet material such as water proof canvas or plastic impregnated fabric and it has a generally annular shape to cover the inner tube 60 when it is inflated. As shown in FIGS. 9–11 I prefer to construct the cover 61 from a pair of upper and lower, generally circular members 62 and 63 that are attached as by bonding or stitching to a central cylindrical member 64. Both the upper and lower circular members 62, 63 have a pair of adjacent openings 65 and 66 attached to the cylindrical member 64 thus providing means for receiving the legs

of the person occupying the boat during its use. To further assist in retaining the boat 20 on the person using it, a vest portion 67 is attached to the upper circular member 62 of the protective cover 61. The vest 67 may be made of the same material as the cover 61 and is provided with adjustable shoulder straps 68. Thus, my boat 20, when fully assembled and ready for use may literally be worn by or supported on its passenger even on land, so that he can walk along the short of the lake or river until a suitable place is found to walk into the water. The shoulder straps 68 are preferably fastened at their free ends to the front portion of the vest 67 by quick releasable buckles 96 of the type that are commercially available. Thus, if necessary, the passenger can quickly remove the straps and leave the boat.

When the circular members 62, 63 are connected to the cylindrical member 64 an annular inner pocket is formed which retains the tube 21. A heavy duty zipper 70 is provided along the cylindrical member 64 of the cover 61 to facilitate the insertion and removal of the inner tube 60 before it is inflated.

As stated above, the protective cover 61 for the tube 60 also provides a means for attaching the support frame 22 to the raft 21. On the upper circular member 62 a pair of female oarlock members 71 are fixed at spaced apart locations as shown in FIG. 9 which also serve to secure the upper ends of the support frame 22. Each oarlock member 71, which comprises essentially a cylindrical sleeve 72 attached at its lower end to a flat plate 73, is retained in position by an overlay piece of flexible material 74 extending around the sleeve 72 and bonded or sewn around its outer edges 75 to the upper circular member 62 (FIG. 12). I may wrap each flat plate 73 with a protective tape material so it will not abrade the covering material 74. Also, the opening 74*a* in the overlay pieces 74 are preferably provided with wear resistant brass grommets. The sleeve member 72 extends upward through the opening 74*a* of each overlay piece 74 to receive a male oarlock member 76 of the well known type, having a full ring or C-shaped upper portion 77 adapted to retain an oar member 46 and having a downwardly extending pin portion 78 adapted to fit easily within the cylindrical sleeve 62. Although it is not absolutely necessary, a retaining pin 79 connected by a chain 80 to the male oarlock member 76 may be placed in aligned holes 81 and 82 in the pin 78 and the sleeve members 72 respectively, to secure each of the oarlock members 76 to the raft 21.

The upper frame members 29 of the support frame 22 are secured to the protective cover 61 by means of the removable male oarlock members 76. When the boat 20 is being readied for use in the water, each upper longitudinal member 29 is connected to a threaded extension 83 by means of a sleeve 84 on each of the tubular extensions 83. The sleeve 84 is loosely retained by a flared end portion 85 and its opposite end 86 is flattened and provided with a circular opening 87 that enables it to fit over the oarlock sleeve 72. The connection of the support frame 22 to the raft cover 61 is further reinforced by a curved metal spreader member 88 having a flattened portion 89 at each end and is connected between the oarlock sleeve member 72 on the inflated raft 21 (see FIG. 7).

On the lower circular portion 63 of the raft cover 61 are a pair of reinforced flexible ear members 90 that are spaced apart in a horizontal plane by substantially the same amount as the oarlocks 71 to receive the outwardly bent end portions 41 of the lower longitudinal members 30 on the support frame 22. The ear members 90 may be made of a double thickness of the same flexible material as the cover 61 or any other suitable material, and each ear 90 has an opening 91 that is reinforced, preferably by a brass grommet along its inner edge. Each ear member 90 is substantially in vertical alignment with a fixed oarlock member 71 on the cover 61 and is spaced apart vertically the same distance as the ends of the frame members 29 and 30.

Operation

The operation of my collapsible motor power boat 20 may be best explained by reviewing the sequence of steps that a sportsman would take in actually using it on a lake or river. In preparation for packing the craft including the motor for some distance on the trail, the annular inflatable tube 60 would, of course, be in the deflated condition and the complete assembly of components in the knocked-down form would be arranged on the support frame or rack 22 in the manner illustrated in FIG. 1. As shown, the ends of the tubular frames 26 are connected to the base member 28 with the hinged float or buoyancy member 53 swung inwardly and positioned between the frame members 26. The motor mounting plate 23 is fixed by its bolts 57 to the upper frame member 27 with the bolts 57 extending through it rearwardly. The outboard motor 24 when fastened to the mounting plate 23 extends downward adjacent the float member 53 and between the frame members 26. The deflated inner tube 60 and its protective cover 61 are folded and secured below the motor 24 on the base member 28.

With the boat components secured, a pair of removable shoulder straps 92 are temporarily attached to the upper and lower ends of the upper support frame members 29 to facilitate the carrying of the entire assembly on a person's back. A flexible backstrap or band of cloth or canvas material (not shown) may also be removably connected across the frame members 29 and it, along with the inwardly curved surface 93 on the base member 28, will enable the frame 22 to fit comfortably against the back of the person carrying the assembly. Thus, when it is necessary for the sportsman to travel over rough roads or trails on foot he can readily carry my craft in knock-down form, with the support frame 22 serving as a pack rack to retain all of the components of the boat.

Upon arrival at the place where the boat is to be used, the packed boat components can be quickly removed from their arrangement as a pack as shown in FIG. 1, and they can be assembled and made ready for actual use. First, the inner tube 60 and its cover 61 are removed and unfolded, and the tube 60 is inserted into position within the cover through the zipper opening 70. The inner tube 60 is then inflated by means of the CO_2 bottle 94 or by means of a hand pump connected to the valve 69 of the tube 60. When inflated to the proper pressure, the tube 60 expands until the cover 61 is stretched fairly tight around it. The ends of the side frame members 26 are then removed from the base member 28 by removing the caps 49 on the lower ends of the upper longitudinal members 29 and by removing the outwardly bent ends 41 from the flange portion 43 of the base member 28. The outboard motor 24 and its motor mounting block 23 are also removed from their stowed position on the upper frame member 27 together with the pair of two-piece oars 46.

With the support frame 22 now free, the extensions 83 are attached by means of the threaded sleeves 84 to the ends of the upper tubular members 29. The frame is now attached to the inflated raft 21 by inserting the outwardly bent end portions 41 into the openings 91 of the spaced apart retaining ears 90 near the lower side of the raft 21 and by connecting the ends 86 of the upper tubular members 29 to the oarlocks 71 as shown in FIG. 12.

The motor mounting plate member 23 is now reattached to the support member 27 in the position shown in FIGS. 7 and 8 to receive the outboard motor 24 in its proper propelling position. It is placed adjacent the cross braces 31 on the side frame 26 and is connected by its

bolts to the upper frame member 27 through the bolt holes 56 by the wing nuts 58, 59.

Before the motor 24 is attached, the movable auxiliary float member 53 is swung outward from the support frame on its hinges so that it extends aft of the craft as shown in FIGS. 7 and 8. In this position it serves to buoy up the craft, and especially when the motor is operated at high speeds it effectively resists the tendency of the motor to dig deeper below the water level. When ready to use the craft, a person merely steps into the vest portion 67 of the cover 61, extending his legs through the openings 65 and 66 and adjusting the shoulder straps 67 properly. He can then walk directly into water until supported by the buoyancy of the inflated raft 21. The motor 24, being within convenient reach can now be started to move the craft through the water, and as it moves along, the passenger's legs extend below the annular raft 21. However, with my invention the motor location is retained outwardly away from the raft 21 so that there is never any danger of the passenger engaging the motor propeller accidentally.

With my craft a passenger can maneuver easily and travel for long periods of time on the water in comfort and security. Yet, as seen from the foregoing description, my boat can be easily and rapidly disassembled and packed into a light compact package that is readily carried on a person's back. Thus, by using my invention, a sportsman can reach remote water areas on foot and be able to travel for substantial distances on the water under power upon his arrival.

To those skilled in the art to which this invention relates, many changes in construction and widely differing embodiments and applications of the invention will suggest themselves without departing from the spirit and scope of the invention. The disclosures and the description herein are purely illustrative and are not intended to be in any sense limiting.

I claim:

1. A portable collapsible one-man boat for sportsmen, adapted to be propelled by an outboard motor and comprising in combination:
- an inflatable body member for supporting a person in an upright position in the water;
- a prefabricated frame structure;
- means for removably attaching said frame structure to said body member in a position extending outwardly from one side therefrom;
- means on said frame structure for supporting an outboard motor in a generally transverse position relative to said frame structure when propelling the boat in the water;
- and means on said frame structure for retaining the outboard motor in a fixed generally parallel position on said frame structure when the latter is detached from said body member;
- whereby when said frame structure is detached from said body member it serves as a pack rack for carrying the motor and the disassembled components of said boat.

2. The device as described in claim 1 including auxiliary body means pivotally attached to said frame structure and adapted to extend rearward of the outboard motor and provide additional stabilizing buoyancy when the motor is propelling the craft.

3. A portable collapsible motor-driven craft for sportsmen comprising in combination:
- an inflatable body member for supporting a person in a generally upright position;
- a prefabricated frame structure adapted to extend outwardly from one side of said body member;
- means for removably attaching said frame structure to said body member;
- and outboard motor mounting means on said frame structure for retaining an outboard in a first fixed position on said frame structure when it is not attached to said body member and said frame structure is being used as a carrying rack for the disassembled components of said craft, said mounting means also being adapted to retain the motor in a second position on said frame structure when said frame structure is attached to said inflated body member for propelling said craft.

4. A portable collapsible boat for sportsmen adapted to be propelled by an outboard motor comprising in combination:
- an inflatable buoyant body member;
- a prefabricated support frame structure;
- means for removably attaching said frame structure to said buoyant body member to retain it in a position extending generally outwardly from one side thereof;
- a movable motor mounting means associated with said support frame for retaining an outboard motor in two positions on said frame;
- means for attaching said mounting means in a first fixed position on said frame when said frame is not attached to said body member and is being used as a carrying rack for the disassembled components of said craft, said motor being retained in a stowed longitudinal position on said frame, said mounting means being adjustable to a second position on said frame structure when said frame structure is attached to said inflated body member with said motor being retained in a generally upright position for propelling said craft;
- and an auxiliary buoyant member hinged to said frame structure and adapted to extend rearward of said motor when said boat is in the water.

5. A portable collapsible boat adapted to be propelled by an outboard motor, comprising in combination:
- a buoyant body section for supporting a passenger in the water, including:
- an inflatable tube member;
- a protective cover adapted to fit at least partially around said tube;
- said covering having means for retaining it on a person and for supporting the person in a generally upright position within the tube member when it is in the water;
- a prefabricated frame structure, including longitudinal frame members, and cross frame members connected thereto;
- means on the ends of said longitudinal frame members for removably attaching said frame structure to said buoyant body section when it is inflated;
- a motor mounting means associated with said frame structure for removably attaching an outboard motor to said frame structure in two different predetermined positions;
- whereby when said frame structure is detached from said buoyant body member with said mounting means in a first position it may serve as a pack rack to facilitate the carrying of the motor in a generally parallel position thereon in addition to the disassembled components of said craft, and when said frame structure is attached to said inflated buoyant body member said mounting means is movable to a second position so that the outboard motor can propel the boat.

6. The collapsible boat described in claim 5 including an auxiliary buoyant member pivotally attached to said frame structure and adapted to lie between said longitudinal frame members when said boat is being carried as a pack and to extend outward and rearward from said frame to provide additional stabilizing buoyancy when the boat is in the water.

7. A portable collapsible boat adapted to be propelled by an outboard motor, comprising in combination:
- a buoyant section for supporting a person, including:
- an inflatable annular tube;

a protective cover of flexible waterproof material adapted to fit at least partially around said tube;

said covering having vest means adapted to fit over the shoulders of the person and web means for retaining the person within the annular tube when it is in the water;

a prefabricated frame structure including longitudinal frame members and cross frame members connected thereto;

means on the ends of said longitudinal frame members and means on said protective cover for removably attaching said frame structure to said buoyant section when it is inflated;

mounting means associated with said frame structure for supporting an outboard motor thereon in a first fixed position generally parallel to said longitudinal frame members when said frame structure is detached from said buoyant section and used as a carrying rack for the disassembled components of said boat, said mounting means being adjustable on said frame structure for retaining the outboard motor in a second position when said frame structure is attached to said inflated buoyant member for propelling said boat.

8. A portable collapsible boat adapted to be propelled by an outboard motor, comprising in combination:

a buoyant section for supporting a passenger in the water, including:

an inflatable annular tubular portion;

a protective supporting cover adapted to fit at least partially around said tubular portion;

said covering having means for connecting it to a person and for retaining the person in a substantially upright position within the annular tube when it is in the water;

a prefabricated frame structure usable as a carrying rack for the motor when not attached to the buoyant section and as a support means for holding the motor in its propelling position when said frame is connected to said buoyant section, said frame structure including longitudinal frame members and an upper end frame member;

removable base means for retaining said longitudinal frame members in a rigid spaced apart relationship when said frame structure is not connected to said buoyancy section thereby facilitating its use as a carrying rack for the deflated buoyant section, the outboard motor and other disassembled components of said craft;

means on the ends of said longitudinal frame members associated with means on said protective cover for removably attaching said frame structure to said buoyant section when it is inflated;

a motor mounting member associated with said frame structure;

means for removably attaching said mounting member to said upper frame member of said frame structure in a first position to support an outboard motor thereon generally parallel to said longitudinal frame members when said frame structure is detached from said buoyant section, and in a second position to support the outboard motor in a position generally transverse to said longitudinal frame member for propelling the boat.

9. A portable collapsible motor driven craft for sportsmen comprising in combination:

an inflatable tubular buoyant member;

a prefabricated frame structure;

means for removably attaching said frame structure to said buoyant member so that it will extend outwardly therefrom above the water level;

an outboard motor;

a mounting means associated with said frame structure for attaching said outboard motor on said frame structure in a first position generally transverse to said frame structure for propelling said craft through the water when said frame structure is attached to said buoyant member and in a second position generally parallel to said frame structure for carrying said motor and the deflated buoyant member when said frame structure is detached from said buoyant member.

10. An inflatable boat for use in combination with an outboard motor mounted on a frame structure attached to said boat, said boat comprising:

an inflatable tube member;

a protective covering of flexible material comprised of upper and lower circular members connected at their edges by a fluid tight seam to a cylindrical band member;

said circular members having a pair of adjacent centrally located openings;

a vest means attached to said upper circular member and having strap means for retaining said inflatable boat in a predetermined position relative to its passenger, both in and out of the water;

and means on said upper and lower circular members for retaining the ends of the motor supporting frame structure on said boat.

11. The boat as described in claim 10 wherein said latter means for retaining said frame structure comprises a pair of spaced apart tab members having reinforced openings extending from opposite sides of said lower circular member, and a pair of spaced apart retaining members on said upper circular member.

12. In a portable collapsible one-man boat, the combination comprising:

an inflatable body member adapted to support at least one man in the water in a generally upright position;

a prefabricated motor supporting frame structure removably attachable to said inflatable body member, said frame structure including a pair of longitudinal frame members;

a transverse member connecting said longitudinal frame members at one end thereof;

a motor mounting member fastened to said frame structure;

means for removably attaching said mounting member to said transverse member of said frame structure in a first position to retain an outboard motor when said frame structure is detached from the collapsible boat and is being used as a carrying means for said motor;

and means for connecting said mounting member to said upper frame structure in a second position whereby the outboard motor is mounted in a position for propelling the collapsible boat when the frame structure is attached thereto.

13. In a portable collapsible boat adapted to be propelled by a small outboard motor, the combination comprising:

an inflatable body member adapted to support at least one man in the water in a generally upright position;

a prefabricated motor supporting frame structure including a pair of upper and lower longitudinal frame members connected together at one end by an end frame member and removably connected at their other ends to said body member;

a motor mounting member on said frame structure having extended bolt means for removably attaching it to said end frame member of said frame structure in a first position to retain an outboard motor when said frame structure is detached from the collapsible boat and is being used as a carrying means for said motor;

said motor mounting member being adjustable on said end to a second position whereby the outboard motor is mounted in a position for propelling the

collapsible boat when the frame structure is attached thereto.

14. The device as described in claim 13 including an auxiliary buoyant body member of rigid plastic material pivotally connected to said end frame member and adapted to extend rearward of the outboard motor when the boat is in the water.

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UNITED STATES PATENT OFFICE

CERTIFICATE OF CORRECTION

Patent No. 3,123,840 March 10, 1964

Louis Cefalo, Jr.

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 5, line 9, for "short" read -- shore --; line 62, for "member" read -- members --; column 7, line 74, after "outboard"insert -- motor --.

Signed and sealed this 18th day of August 1964.

(SEAL)
Attest:

ERNEST W. SWIDER
Attesting Officer

EDWARD J. BRENNER
Commissioner of Patents