March 25, 1969 R. B. CLYMER 3,434,166

HOUSEBOAT

Filed Sept. 22, 1967 Sheet 1 of 2

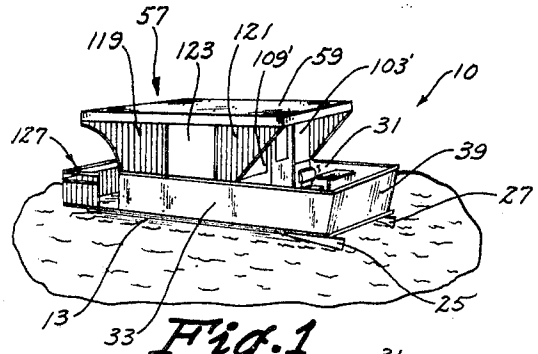


Fig. 1

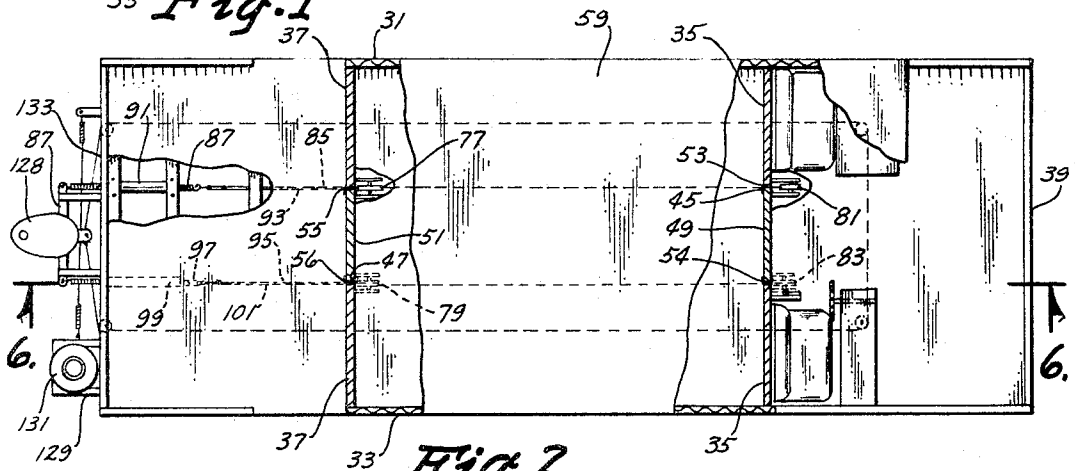


Fig. 2

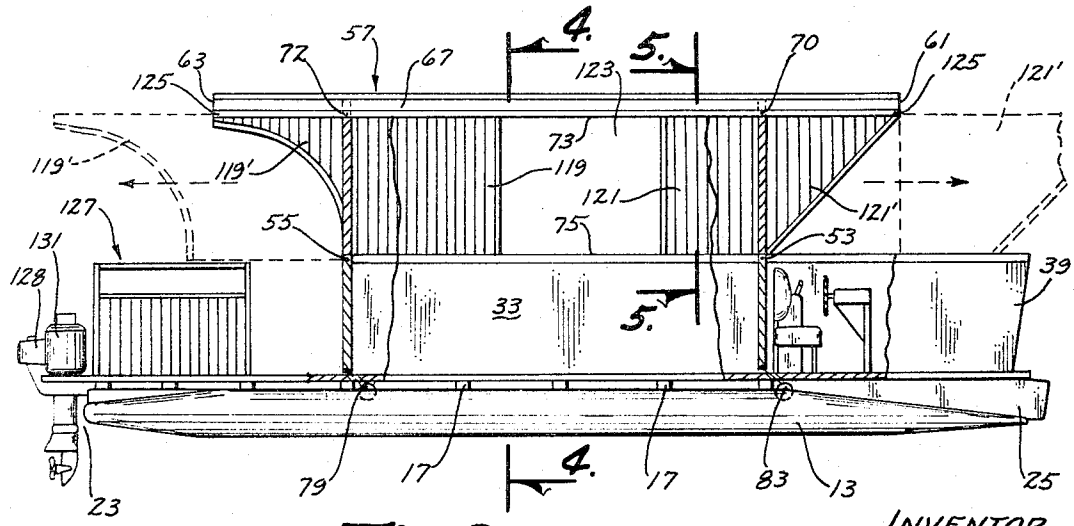


Fig. 3

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HOUSEBOAT

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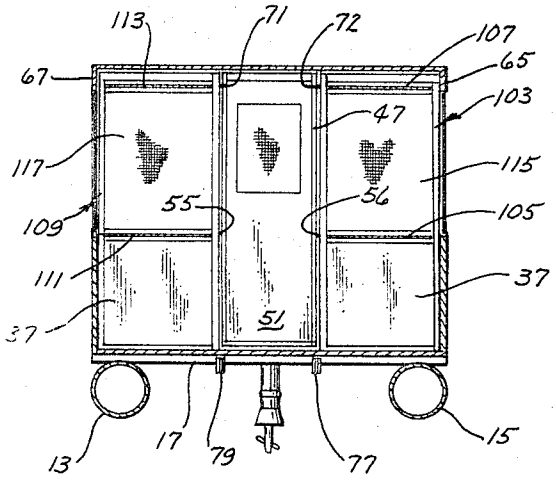
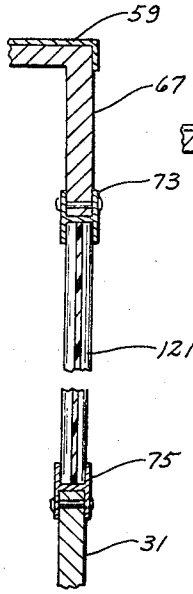


Fig. 4



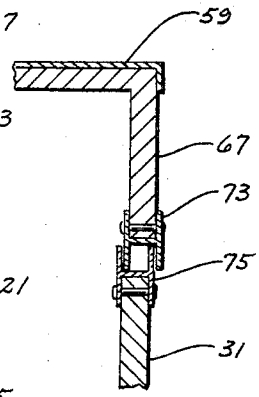


Fig. 8

Fig. 5

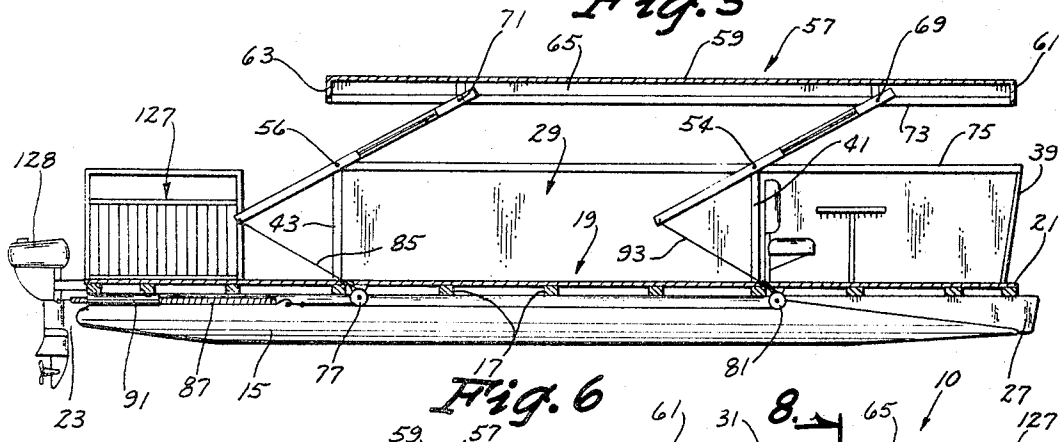


Fig. 6

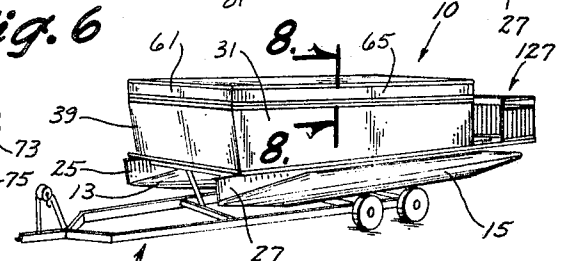


Fig. 7

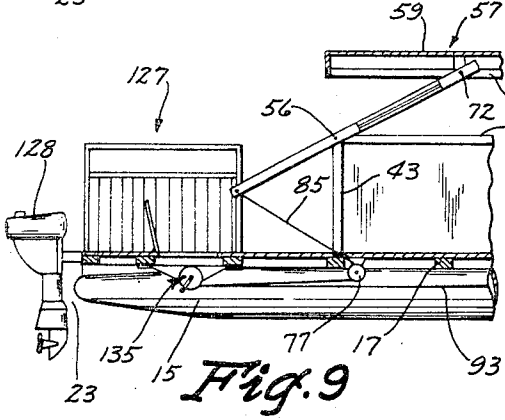


Fig. 9

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3,434,166

HOUSEBOAT

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Int. Cl. B63b 29/02; B60p 3/34
U.S. Cl. 9—1 8 Claims

ABSTRACT OF THE DISCLOSURE

A houseboat having a collapsible room portion provided thereon, the room portion consisting of a wall means extending upwardly from the floor which extends between a pair of spaced apart pontoons. A top deck portion is operatively pivotally secured to the wall means and is movable from a lowered position on the wall means to a raised position above the wall means. The top deck means is pivotally secured to the wall means by a door means at each end thereof and the door means aids in maintaining the top deck means in its raised position.

Houseboats generally consist of a room portion which is secured to a pair of pontoons or the like. These houseboats are difficult to transport over the highways due to the size of the room thereon.

Therefore, it is a principal object of this invention to provide a houseboat having a collapsible room portion provided thereon.

A further object of this invention is to provide a houseboat having a collapsible room portion provided thereon so that the houseboat may be easily transported over the highways.

A further object of this invention is to provide a houseboat having a top deck means which is pivotally secured to a wall means by means of a door at each end thereof.

A further object of this invention is to provide a houseboat having a collapsible room portion provided thereon which is easily moved from its transport position to its operative position.

A further object of this invention is to provide a houseboat which has a collapsible room portion provided thereon, the houseboat being completely enclosed when the collapsible room portion has been collapsed for storage or transportation.

A further object of this invention is to provide a houseboat having a collapsible room portion provided thereon, the room portion being maintained in its assembled condition by a door means at each end thereof and a plurality of panel members.

A further object of this invention is to provide a houseboat which is of lightweight construction.

A further object of this invention is to provide a houseboat which is economical of manufacture, durable in use and refined in appearance.

These and other objects will be apparent to those skilled in the art.

This invention consists in the construction, arrangements, and combination of the various parts of the device, whereby the objects contemplated are attained as hereinafter more fully set forth, specifically pointed out in the claims, and illustrated in the accompanying drawings in which:

FIG. 1 is a perspective view of the houseboat in an assembled condition in the water;

FIG. 2 is a top plan view of the houseboat in an assembled condition with portions thereof cut away to more fully illustrate the invention;

FIG. 3 is a side view of the houseboat with portions thereof cut away to more fully illustrate the invention, the broken lines indicating the manner in which the side panels of the room portion are removed;

FIG. 4 is a sectional view as seen along lines 4—4 of FIG. 3;

FIG. 5 is an enlarged fragmentary sectional view as seen on line 5—5 of FIG. 3 to illustrate the manner in which the side panels are received by the top deck means and the wall means;

FIG. 6 is a sectional view of the houseboat as seen on lines 6—6 of FIG. 2 illustrating the top deck means in a partially raised position;

FIG. 7 is a front perspective view of the houseboat mounted on a trailer means in a transport position;

FIG. 8 is an enlarged sectional view as seen along lines 8—8 of FIG. 7 to illustrate the manner in which the top deck means is received by the upper ends of the wall means; and

FIG. 9 is a fragmentary longitudinal sectional view similar to FIG. 6 which illustrates a modified cable arrangement for raising and lowering the top deck means.

The houseboat of this invention is generally designated by the reference numeral **10** and is seen floating in the water in FIG. 1 and mounted on a trailer **11** for transportation in FIG. 7. The numerals **13** and **15** designate a pair of hollow pontoons having a plurality of stirngers **17** secured thereto and extending therebetween as seen in FIGS. 4 and 6. A floor means **19** is secured to the upper surface of stringers **17** by any convenient means and the stringers **17** and floor means **19** serve to maintain the pontoons **13** and **15** in a spaced relationship with respect to each other. For purposes of description, the houseboat **10** will be described as having a forward end **21** and a rearward end **23**. The forward ends of pontoons **13** and **15** have a pair of plates **25** and **27** secured thereto respectively which are designed to add stability to the forward end of the boat.

A wall means **29** is secured to floor means **19** and consists of side walls **31** and **33**, front wall **35** and back wall **37**. As seen in FIGS. 1 and 2, front wall **35** is spaced rearwardly from the forward ends of the boat **30** that side walls **31** and **33** extend forwardly therefrom. An inclined wall **39** extends between the forward ends of side walls **31** and **33** as seen in FIG. 6. Front wall **35** is provided with a door opening **41** formed therein and back wall **37** is provided with a door opening **43** formed therein. A door frame **45** is pivotally secured to front wall **35** within door opening **41** and extends upwardly therefrom when in a vertical position. Likewise, a door frame **47** is pivotally secured to back wall **37** within door opening **43** and extends upwardly therefrom when in a vertical condition. Door frame **45** has a door **49** hingedly mounted therein and door frame **47** has a door **51** hingedly mounted therein to permit access to the interior of the wall means **29**. As seen in FIG. 2, door frame **45** is pivotally secured about a horizontal axis to front wall **35** at **53** and **54** while door frame **47** is pivotally secured about a horizontal axis to back wall **37** at **55** and **56**.

A top deck means **57** including a top **59**, downwardly extending front and rear walls **61** and **63** respectively, and downwardly extending side walls **65** and **67**, is pivotally secured to door frames **45** and **47** at **69**, **70** and **71**, **72** respectively. A window frame means **103** is hingedly secured to the upper end of back wall **37** at one side of the door **51** by means of a hinge **105** and is hingedly secured at its upper end to top deck means **57** by means of a hinge **107**. A window frame means **109** is hingedly secured to the upper end of back wall **37** at the other side of door **51** by means of a hinge **111** and is hingedly secured to top deck means **57** by means of hinge **113**. Window frames **103'** and **109'** are likewise provided at opposite sides of door **49**. As seen in FIG. 4, a screen means **115** is mounted in window frame **103** while a screen means **117** is mounted in window frame **109**.

As seen in FIG. 8, the lower ends of the downwardly extending walls **61**, **63**, **65** and **67** are provided with an H-shaped aluminum channel member **73** which is secured thereto by bolts or the like. As also seen in FIG. 8, the upper ends of the walls of the wall means **29** are also provided with an H-shaped channel member **75** secured thereto by bolts or the like which is adapted to engage the channel member in the manner illustrated in FIG. 8 when the top deck means **57** is in a lowered position with respect to the wall means **29**.

A pair of pulleys **77** and **79** are secured to the under side of floor means **19** forwardly of door frame **47** and at opposite sides thereof as best illustrated in FIG. 2. A pair of pulleys **81** and **83** are secured to the under side of floor means **19** forwardly of door frame **45** and at opposite sides thereof as also illustrated in FIG. 2. A cable **85** is secured to the lower end of door frame **47** and extends downwardly through a suitable opening in the floor means **19** and extends around pulley **77** and thence rearwardly to a spring **87** to which it is connected. Spring **87** is secured at its rearward end to a support means **89** and is partially enclosed by a tubular member **91**. A cable **93** is also secured to the forward end of spring means **87** and extends forwardly therefrom and around pulley **81**, upwardly through a suitable opening in floor **19** and is secured to the lower end of door frame **47** at one side thereof. A cable **95** is secured to the lower end of door frame **47** at the other side thereof and extends downwardly through a suitable opening in the floor means **19**, around pulley **79** and thence rearwardly to the forward end of a spring means **97** to which it is connected. Spring means **97** is connected at its rearward end to support **89** and is partially enclosed by a tubular member **99**. A cable **101** is secured to the forward end of spring means **97** and extends forwardly therefrom and passes around the forward end of pulley **83** and thence upwardly through a suitable opening in the floor means **89** and is connected to the lower end of door frame **45** at the other side thereof. The various cable and spring arrangement is such that the springs **87** and **97** will be in a substantially relaxed condition when the door frames **45** and **47** are in a vertical position. As the door frames **45** and **47** are pivoted from a vertical position to the position seen in FIG. 6, the springs **87** and **97** will be stretched and will yieldably resist the pivotal movement of the same and will prevent the top deck means from lowering too suddenly. Also, the springs will aid in raising the top deck means due to the fact that the springs, in returning to their relaxed conditions, will counteract the weight of the top deck means.

Top deck means **57** may be maintained in its raised position seen in FIG. 3 by means of suitable pins or the like extending from each of the door frames which will lock the door frames in a vertical position. The top deck means **57** is also aided in maintaining its raised position by corrugated panel members **119** and **121** extending between the channel member **73** on side wall **67** of top deck means **57** and channel member **75** provided on the upper end of side wall **33** in the manner illustrated in FIG. 5. Panel members **119** and **121** are spaced from each other thereby defining a window opening **123**. Panels **119** and **121** are maintained in their respective positions by suitable bolt members **125** which extend through the panel member and the side wall **67** of top deck means **57**. Likewise, a pair of panel members **119'** and **121'** are provided at the other side of the houseboat. As seen in FIG. 5, the panel members are merely slidably received between the channel members **73** and **75** and are inserted thereinto from the forward and rearward ends of the top deck means.

A rear deck wall means **127** is provided at the rearward end of the floor means **19** and a motor **129** is secured to support means **89** to propel the boat. The numeral **129** designates a support means which is designed to support a tank **131** containing propane, butane or the like. The

motor **127** is controlled by various cables **133** extending therefrom to the forward end of the boat.

A modified means for raising and lowering the top deck means is illustrated in FIG. 9 and it can be seen that a winch means **135** has been substituted for the springs and which is controlled by a lever **137**. Thus, the door frames can be pivoted by merely controlling the direction of operation of the winch means **135** by the control lever **137**. FIG. 7 illustrates the houseboat in a storage or transportation condition and is mounted on the trailer **11** for transportation purposes. The boat **10** is placed in operation by simply placing the boat in the water and raising the top deck means **57** from the position of FIGS. 7 and 8 to the position of FIG. 3. As seen in FIG. 8, the channel members **73** and **75** engage each other when the houseboat is in a collapsed position thereby sealing the interior of the room portion from the elements. When the door frames have been raised to their vertical position, they are locked in position as previously described and the various panel members **119**, **119'**, **121** and **121'** are slidably mounted between the lower end of the canopy means and the upper end of the wall means thereby aiding in maintaining the top deck means in its raised position as well as partially enclosing the interior of the room portion which is defined by the wall means **29**. Access is gained to the interior of the room portion by means of doors **49** and **51** mounted in door frames **45** and **47** respectively. It can be seen that the size of the houseboat is greatly increased when the top deck means **57** is raised from the position of FIG. 7 to the position of FIG. 3. The houseboat is completely enclosed when in the position of FIG. 7 and top deck means **57** may be positively secured to the wall means **29** by means of suitable locks or the like to prevent vandalism or the like if the houseboat is to be left for any period of time.

Thus it can be seen that a unique houseboat has been provided which occupies a relatively small amount of space when in a transport position but which may be expanded to provide a relatively large room portion when the boat is being used. The pivotal movement of the top means **57** is enhanced by the connection of the door frames **45** and **47** with the springs which permits the houseboat to be collapsed or assembled in a very short time. Preferably, the side walls of wall means **29** and the top deck means **57** should be constructed of a sandwich panel comprised of aluminum Styrofoam and a wood panel laminated as one solid panel. This construction of the top deck means **57** permits the same to support a plurality of sun bathers or the like thereon. The use of these materials insures that the houseboat will be of light weight construction so that the device may be easily transported over the highways as well as insuring that the houseboat will be stable in the water. Thus it can be seen that the houseboat accomplishes at least all of its stated objectives.

Some changes may be made in the construction and arrangement of my HOUSEBOAT without departing from the real spirit and purpose of my invention.

I claim:

1. In a houseboat,

at least two spaced apart, floatable pontoons,

a floor means operatively secured to said pontoons,

a wall means extending upwardly from said floor means,

and a top deck means operatively pivotally secured to said wall means and being movable from a first position wherein said top deck means engages the upper portion of at least some of said wall means to a second position wherein said top deck means is spaced above the upper portion of said wall means,

said wall means including a front wall and a back wall, said front and back walls each having a door frame means pivotally mounted therein and being pivotal about a horizontal axis with respect thereto, said door frame means being pivotally connected intermediate their upper and lower ends to said walls, said

door frame means also being pivotally secured adjacent their upper ends to said top deck means.

2. The houseboat of claim 1 wherein a spring means is operatively connected to said door frame means which yieldably resists the pivotal movement of said door frame means from a vertical position to a horiztonal position.

3. The houseboat of claim 1 wherein a winch means is operatively connected to said door frame means for pivotally moving said door frame means.

4. The houseboat of claim 1 wherein said wall means and said top deck means have channel members extending therefrom which engage each other when said top deck means is in its first position.

5. The houseboat of claim 4 wherein a plurality of panel members are slidably mounted in said channel members and extend therebetween when said top deck means is in its second position.

6. The houseboat of claim 1 wherein first and second window frame means are hingedly secured to the upper end of said back wall and said top deck means at opposite sides of the door frame means mounted therein and

wherein third and fourth window frame means are hingedly secured to the upper end of said front wall and said top deck means at opposite sides of the door frame means mounted therein.

7. The houseboat of claim 1 wherein a rigid door means is hingedly mounted in each of said door frame means.

8. The houseboat of claim 1 wherein said top deck means is comprised of a Styrofoam material and a panel laminated together.

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U.S. Cl. X.R.

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