Dec. 15, 1959 G. G. PARROTT 2,916,747

CARRIER FOR BOATS

Filed Nov. 1, 1954

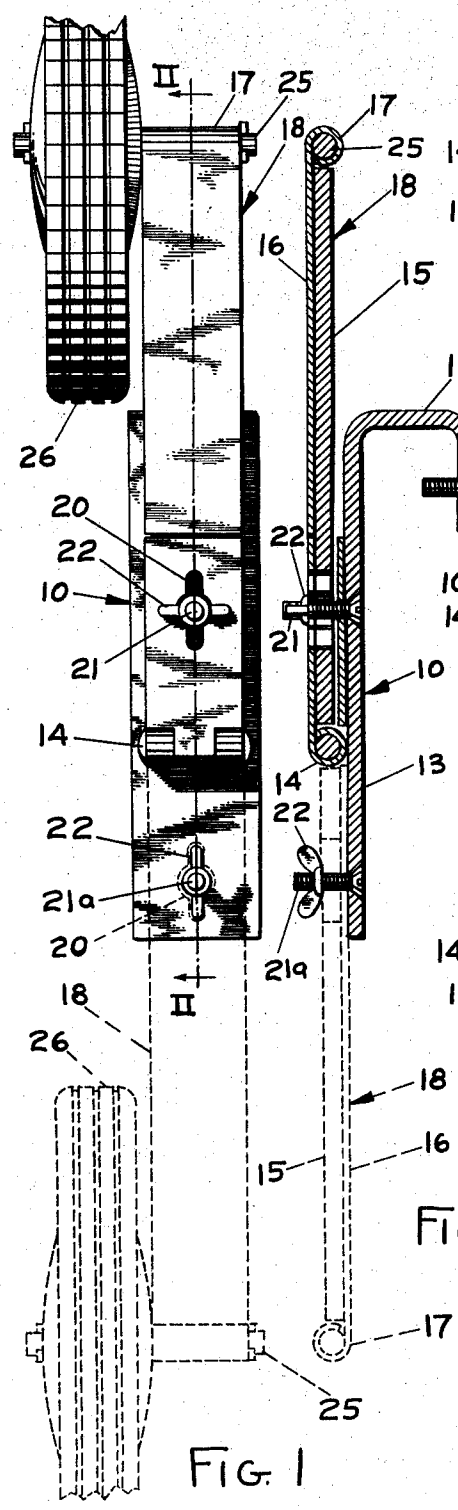


FIG. 1

FIG. 2

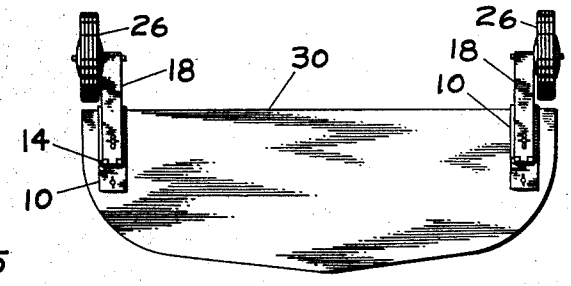


FIG. 3

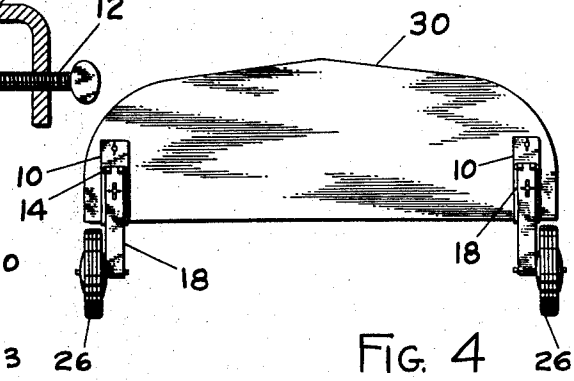


FIG. 4

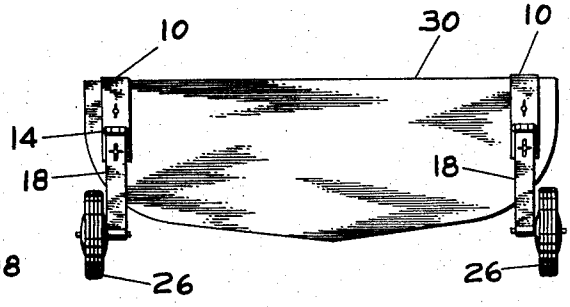


FIG. 5

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United States Patent Office 2,916,747
Patented Dec. 15, 1959

2,916,747

CARRIER FOR BOATS

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Application November 1, 1954, Serial No. 465,943

2 Claims. (Cl. 9—1)

This invention relates to boat carriers and more particularly to a boat carrier consisting of a pair of detachable wheel mountings so designed that they may remain on the boat at all times and permit the boat to be carried in either an inverted or an upright position.

The object of this invention is to provide a light weight and relatively inexpensive means to facilitate the movement of a boat on land.

A further object of this invention is to provide a single means which will permit the boat to be moved whether it is upright or inverted.

An additional object of this invention is to provide a supporting means for a boat so designed that a boat equipped with this invention may be easily and readily moved by a single person.

A further object of this invention is to provide a boat carrier which is useful both as a means of facilitating the loading of the boat on a vehicle top and as a means for facilitating the movement of the boat from a vehicle to its launching site.

These and other objects and purposes of this invention will be immediately seen by those acquainted with the design and use of boat carriers upon reading the following specification and the accompanying drawings.

In the drawings:

Fig. 1 is a front elevation view of my invention showing the wheel mounting in one operating position in solid lines and in the other operating position in phantom lines.

Fig. 2 is a central sectional view taken along the plane II—II of Fig. 1.

Fig. 3 is an end elevation view of a boat equipped with my invention as it would be positioned when the boat has been launched.

Fig. 4 is a rear elevation view of a boat equipped with my invention as the invention would appear when the boat is being transported in inverted position on land.

Fig. 5 is a rear elevation view of a boat equipped with my invention showing the invention as it would appear when the boat is being transported in upright position on land.

In executing the objects and purposes of this invention, I have provided an anchor bracket equipped with means for detachably mounting it to the boat structure. The anchor bracket has a hinge so located that when the unit is mounted on the boat, the hinge will be adjacent the centerline of the boat. This hinge secures a leg to one end of which is mounted a wheel. By pivoting the leg about the hinge, the wheel may be raised or lowered so that in one position it is above the boat and the other position is below the boat.

A pair of these supports are used, one on each side of the boat to provide support and stability for one end of the boat.

Referring specifically to the drawings, the numeral **10** indicates an anchor bracket having a U-shaped hook **11** at its upper end. The size of the hook is such that it will readily fit over the stern board of a boat. The short

end of the hook **11** is equipped with a fastening means such as the threaded wing bolt **12**. It will be recognized that any other fastening means may be substituted for the wing bolt **12** and this invention is intended to embrace any such fastening devices.

The long leg **13** of the anchor bracket **10** is, in effect, a strap designed to lie against the exterior face of the boat. At a point substantially removed from both ends of the strap portion **13**, a hinge **14** is secured to the strap **13** by any suitable means such as welding. The hinge **14** must be of a design which will permit 180° of rotation. The purpose of this will appear more fully hereinafter.

Secured to the hinge **14** by suitable means such as welding is an elongated strap-like leg plate **15**. The outer end of the leg plate **15**, by means of welding, mounts a strap **16**, the outer end of which is formed into a loop **17**. The plate **15** is used purely as a reinforcement since the strap **16** and the material of the hinge **14** have to be of thinner gauge to permit the formation of the loops **17** and the one used at the hinge **14**. It will be recognized that the strap **16** and material of the hinge **14** may be a single piece if desired. It will also be recognized that it is within the concept of this invention to eliminate the reinforcement plate **15** and bead or corrugate the strap **16** in such a manner that reinforcement is unnecessary. All of these various ways of building the leg **18** are to be considered as part of this invention.

The leg **18**, adjacent the hinge but spaced sufficient distance therefrom to provide adequate support, is equipped with a slot **20** having an enlarged circular center. The slot **20** is illustrated as extending lengthwise of the leg but it will be recognized that it may be oriented laterally of the leg. For cooperation with the slot, a pair of studs **21** and **21***a* are secured to the anchor member **10**. The studs **21** and **21***a* are identical and are equally spaced from the centerline of the hinge **14**, one on each side thereof. A wing nut **22** is mounted on each of the studs. Preferably, the ends of the studs are slightly peened to prevent the wing nuts from becoming completely detached. The size of the slot **20** is such that the wing nuts, while still mounted on the studs, may pass through it.

It will be recognized that various other types of fastener-locking means may be used to effect the holding of the leg in either of its operating positions, and this invention is not to be construed as limited to the specific wing-nut arrangement illustrated.

A stub shaft **25** is firmly secured within the loop **17** at the outer end of the leg **18**. Mounted on the stub shaft **25** and to one side of the leg **18** is a freely rotatable wheel **26**. The wheel may be of any suitable construction but should have sufficient diameter to permit the boat to be readily moved over the ground and have a tread of sufficient width that the wheel will not sink in soft earth under the weight of the boat.

The various parts for my carrier may be manufactured from any suitable material such as steel, magnesium or aluminum. If necessary, to prevent corrosion, they should be plated or painted to prevent rapid disintegration in the water and to prevent the rust from marring the finish of the boat.

Operation

This invention is primarily designed to be used with small and medium sized boats, such as row boats of the type conventionally used for pleasure or fishing in inland waters. The carriers are used in pairs, one being used on each side of the centerline of the boat, preferably being spaced as far apart as is practical. This arrangement gives stability to the boat.

To attach the carriers, the anchor member **10** is placed

over the top of the stern board **30** of the boat with the top of this board seating tightly into the hook portion **11**. The thumb screws **12** are then tightened, locking the unit to the boat. No other attachment is necessary since the width of the anchor member **10** acting against the top edge of the stern board tends to prevent side movement of the fittings. Also, the large bearing surface of the anchor member against the exterior surface of the boat resists any swinging movement. The anchor member **10** is so designed that when the hook portion **11** is firmly seated against the top of the stern board **30** the pivot point of the hinge **14** is substantially midway between the top and the bottom of the boat. Thus, whether the leg **18** is turned up or down, the wheel **26** will be clear of the boat and will not be hindered in its rotation.

Fig. 4 shows the boat in inverted position, such as it would be as it is removed from the car top carriers of a vehicle. In this case the legs **18** are pivoted so that the wheels project beyond the top of the boat and support the boat above the ground. With the wheels in this position, the legs **18** are held against pivotal movement by tightening the wing nuts **22** on the stud **21**.

Preparatory for launching, the legs **18** may be moved to their opposite position. In this case the wing nuts **22** on the studs **21** are loosened and oriented with the slot **20** so that the leg **18** may be moved over the wing nuts and flipped 180° so that the wheels will project below the boat rather than above it. The wing nuts **22** on the studs **21***a* are then tightened to lock the legs **18** in position. In this manner the boat may be picked up from one end and by means of the supporting wheels **26** at the other end of the boat may easily be moved by a single person down and actually into the water until it floats. The wing nuts **22** and the studs **21***a* are then loosened and the wheels returned to their original position above the top of the boat. They may remain in this position throughout the use of the boat, since being spread as far apart as they are, they will not interfere in any way with the operation of an outboard motor which may be mounted on the stern of the boat or with any rudder structure which may be present.

Where detachability of the whole unit from the boat is not desired, the anchor brackets **10** may be permanently secured to the boat by bolting them directly to the exterior surface of the boat. In this situation the hook portions **11** of the anchor brackets **10** may be eliminated. If it is desirable to permanently mount the anchor brackets **10** but to make the legs **18** and wheels **26** removable, this may be accomplished by equipping the hinges **14** with removable pins.

It will be seen from this description that this arrangement provides an inexpensive, simple and easily maneuvered means of supporting the boat for transport to and from the water. The invention is so designed that it adds little or no weight to the boat and may remain permanently on the boat, if so desired, since it neither interferes with its navigation on the water nor with its transportation on the top of a vehicle. If the wheels interfere with a vehicle after the boat has been mounted on the car top carriers, they may be flipped into the opposite position and thus the interference eliminated. The weight of the wheels and their mounting structure is relatively insignificant, therefore, not appreciably adding to the burden to be lifted by the boat operator when the device is placed on the transporting vehicle. This invention, when not in use and not mounted on the boat, may be compactly stored in a very small area.

While I have described a preferred embodiment of my invention with the carriers mounted to the stern panel of the boat, it will be recognized that this invention, while still using the central pivot point principle, may be applied to the side of the boat to produce the effect of carriers capable of supporting the boat in both upright and inverted positions without the necessity of removing the carriers from the boat. The basic principle remains the same. This and other such modifications are to be considered as included in the hereinafter appended claims unless these claims by their language expressly state otherwise.

I claim:

1. In combination a boat and a wheeled support therefor, said wheeled support having a pair of anchor brackets; means for detachably securing said anchor brackets to the back panel of said boat, one on each side of the centerline thereof; a pair of leg members; means for pivotally mounting one end of each of said leg members to one of said brackets adjacent the midpoint between the top and bottom of said boat; a wheel rotatably mounted to the other end of each of said leg members; each of said leg members being pivotable through a semi-circular arc to extend either above or below said boat; the length of said leg members being such that when said leg members are in either their raised or lowered position said wheels will be clear of said boat.

2. In combination a boat and a wheeled support therefor, said wheeled support having a pair of anchor brackets each adapted to be mounted against an exterior portion of said boat, one on each side of the centerline thereof; a pair of leg members; means for pivotally mounting one end of each of said leg members to one of said brackets adjacent the midpoint between the top and bottom of said boat; a wheel rotatably mounted to the other end of each of said leg members; each of said leg members being pivotable through a semi-circular arc to extend either above or below said boat; the length of said leg members being such that when said leg members are in either their raised or lowered position said wheels will be clear of said boat; the axis of pivotal movement of said leg members being parallel to the adjacent portion of said boat whereby said wheels pivot outwardly from said boat; a pair of threaded studs on each of said anchor brackets, one on each side of and equally spaced from said pivotal mounting means; a slot in each of said leg members adapted to cooperate with said studs; a wing nut on each of said studs, said wing nuts in one position adapted to pass through said slot.

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