

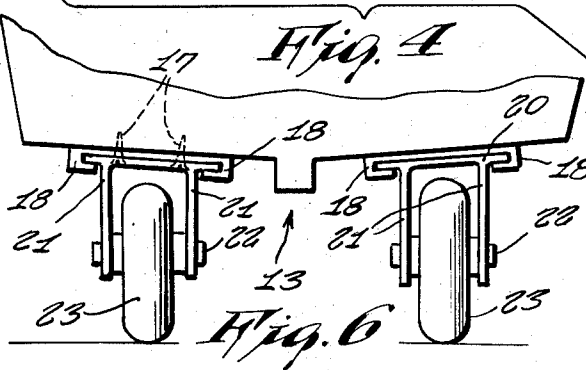
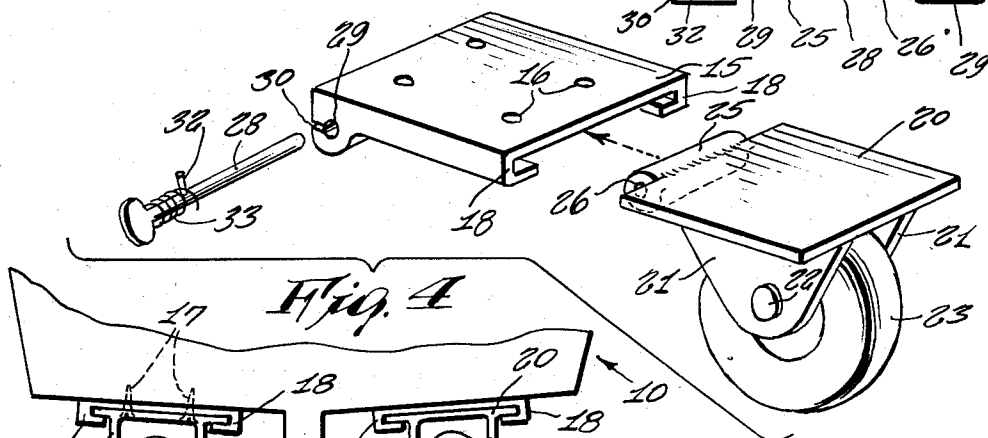
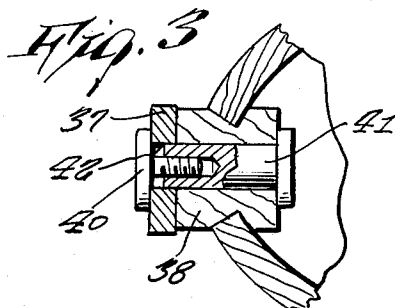
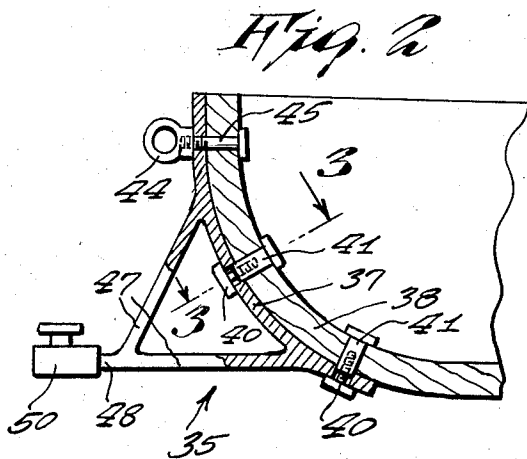
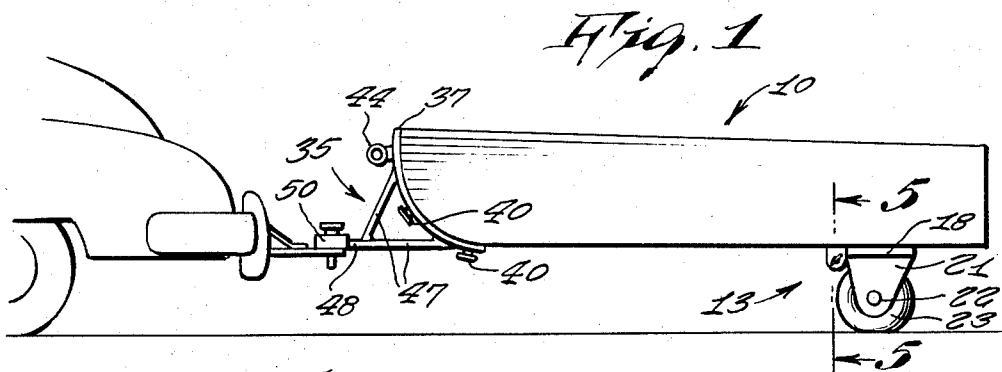
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C. W. BORCHERS, JR

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DETACHABLE RUNNING GEAR FOR TRANSPORTING SMALL BOATS

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INVENTOR.
CHARLES W. BORCHERS, JR.

BY

Carl Miller
ATTORNEY

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2,909,378

DETACHABLE RUNNING GEAR FOR TRANSPORTING SMALL BOATS

Charles W. Borchers, Jr., Chalmette, La.

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1 Claim. (Cl. 280—79.1)

This invention relates to boating equipment and, more particularly, to a device for transporting small boats.

Ordinarily, the mounting and dismounting of small boats upon trailers is a rather time consuming and strenuous task. Furthermore, such trailers which are ordinarily used to transport boats from one place to another are quite expensive to purchase and also require a substantial amount of maintenance in order to keep them in proper condition. It is an object of the present invention to provide a detachable running gear for small boats that can be readily applied to and removed from the boat for transport thereof that is extremely simple in construction, efficient in operation, and which will overcome the aforementioned problems.

Another object of the present invention is to provide detachable running gear that is applied directly to the boat, thus obviating the necessity of having to provide a separate self-supporting mounting for the boat, whereby the boat is connected directly to the towing vehicle.

Still a further object of the present invention is to provide a detachable running gear for transporting small boats of the type described that is much easier to control during transport of the boat and which can be manufactured in large quantities at relatively low cost.

All of the foregoing and still further objects and advantages of this invention will become apparent from a study of the following specification, taken in connection with the accompanying drawing, wherein:

Figure 1 is a fragmentary side elevational view of running gear made in accordance with the present invention in operative association with a boat that is attached to the rear end of a towing vehicle;

Figure 2 is an enlarged fragmentary side elevational view, with parts broken away, of certain parts of the apparatus shown in Figure 1;

Figure 3 is an enlarged transverse cross sectional view taken along line 3—3 of Figure 2;

Figure 4 is an enlarged exploded perspective view of other parts of the running gear shown in Figure 1;

Figure 5 is an enlarged transverse cross sectional view taken along line 5—5 of Figure 1; and

Figure 6 is an enlarged fragmentary rear elevational view of the unit shown in Figure 1.

Referring now to the drawing, and more particularly to Figure 1 thereof, a small boat 10 is shown in operative association with apparatus made in accordance with the present invention for transporting the boat from one location to another. This apparatus includes a set of running gear 13 that is detachably connected to the bottom of the boat adjacent to the stern thereof. As is more clearly shown in Figures 4 to 6 of the drawing, this running gear includes a pair of wheel assemblies, each of which is substantially identical to the other.

Each of the wheel assemblies includes a track plate 15 having holes 16 for receiving wood screws 17 there-through for direct attachment to the bottom of the boat 10. A channel 18 is provided at each side of the track plate 15 for providing a guideway that slidably receives

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a slide plate 20. A pair of spaced apart parallel bearings 21 depend from the bottom of the slide plate 20 and rotatably support an axle 22 that extends diversely therebetween. A pneumatic type wheel 23 is rotatably carried upon the axle 22 so as to support the weight of the boat directly upon the ground. A cylindrical member 25 is welded to the front edge of the slide plate 20, such member having a longitudinal bore 26 that is adapted to be moved into alignment with similar bores 29 at the front end of the track plate 15. When in the proper assembled position, a latch pin 28 is extended through the aligned bores 26, 29, thus locking the slide plate 20 to the track plate 15. The front end of the track plate 15 is also provided with a key way 30 that slidably receives a lock pin 32 that extends transversely outwardly from the side of the latch pin 28. A compression spring 33 acting between the head of the latch pin 28 and the adjacent side of the track plate 15 normally resists movement of the lock pin 32 out of the locking position shown in Figure 5, whereby the parts may be safely connected together.

Referring now to Figures 1 to 3 of the drawing, a tow bar unit 35 is shown which is detachably connected to the bow 38 of the boat. This tow bar unit includes an arcuate plate member 37 that has a contour substantially the same as the contour of the bow 38. Thus, thumbscrews 40 extending through spaced apart holes 42 in the arcuate member 37 are operated to threadedly engage with internally threaded fasteners 41 that are permanently secured to the bow 38. An eye nut 44 is also threadedly engaged with a permanently attached bolt 45 to provide means for handling the unit as it is attached to the vehicle, or for other similar purposes. A pair of angularly related arms 47 extend outwardly from the arcuate member 37 and converge at a horizontal connecting bar 48, to which a coupling 50 is attached.

In actual use, the running gear 13 and tow bar unit 35 are applied to the boat in the manner shown in the drawing. When the vehicle has towed the boat to the launching site, the running gear wheel assemblies are readily removed from the permanently attached track plate 15 by simply withdrawing the locking and latch pins therefrom. At the same time, the eye nut 44 and thumb screws 40 are released so as to remove the tow bar unit from the bow of the boat, following which the boat may be readily manipulated and moved into the water. When moving the boat from the water to a land location, the running gear and tow bar unit are applied in the reverse manner.

While this invention has been described with particular reference to the construction shown in the drawing, it is to be understood that such is not to be construed as imparting limitations upon the invention, which is best defined by the claim appended hereto.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

Detachable running gear for transporting small boats comprising, in combination, a pair of weight supporting wheel assemblies, means detachably securing said wheel assemblies to the bottom of a small boat adjacent to the stern thereof, a tow bar, means detachably securing said tow bar to the bow of the boat, said tow bar having means for releasable connection to a self-propelled land vehicle, each one of said wheel assemblies comprising a slide plate, a pair of depending bearing plates, a transverse axle carried by said bearing plates, a wheel rotatably supported upon said axle intermediate said plates, a track plate detachably securing said slide plate to the boat, said track plate having permanent fastening means securing it to the boat, a pair of inwardly facing channels on each side of said track plate slidably receiving said slide plate, and a releasable latch locking said slide plate

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to said track plate, said releasable latch comprising a latch pin, aligned bores in said track plate and guide plates rotatably and slidably receiving said latch pin, a bayonet slot in said track plate, a transversely outwardly extending lock pin secured to said latch pin, said lock pin being removably positioned within said bayonet slot, and a spring normally biasing said lock pin toward locking engagement within said slot.

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