United States Patent

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[54] **COLLAPSIBLE TRAILER APPARATUS**
12 Claims, 10 Drawing Figs.

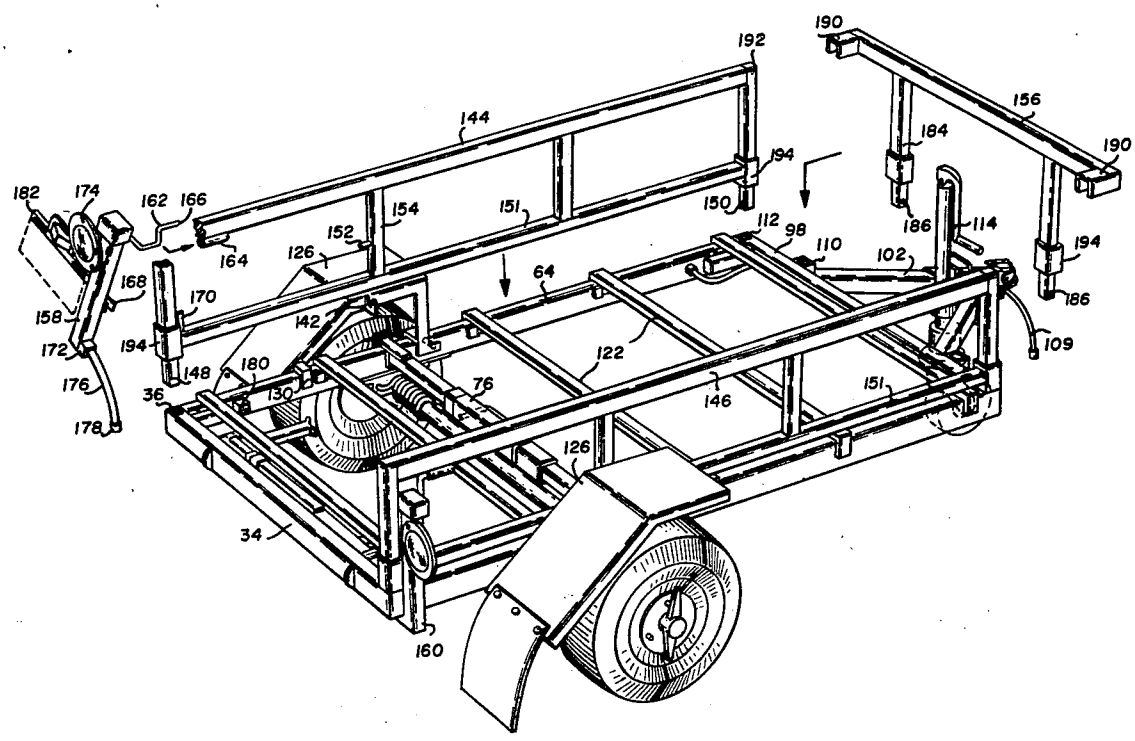
[52] **U.S. Cl.** **280/106, 296/28**
[51] **Int. Cl.** **B62d 23/00**
[50] **Field of Search** ..... 296/28 K, 27, 1; 280/401, 415, 106, 34 A, DIG. 8, 106 T

[56] **References Cited**
UNITED STATES PATENTS

2,801,863	8/1957	Raney	280/106 T
3,287,026	11/1966	Craven	280/106 T
3,413,016	11/1968	Bertolini	280/DIG. 8

Primary Examiner—Philip Goodman
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ABSTRACT: A collapsible trailer assembly including a plurality of lightweight rigid components which, when assembled in a predetermined order, interlock to form the superstructure of a trailer vehicle which can be fully assembled by a person of average strength and dexterity without the use of tools and without the use of bolts, screws or other ordinary fastening means.



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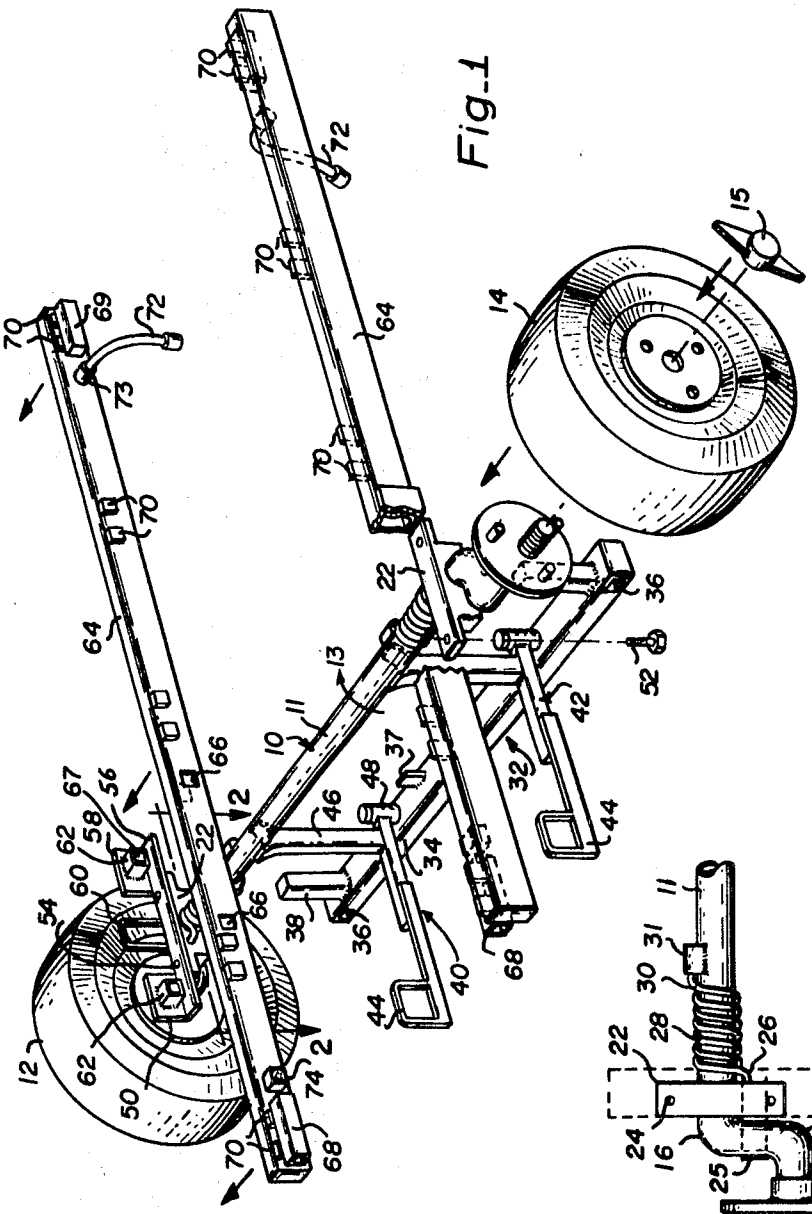


Fig. 1

Fig. 2

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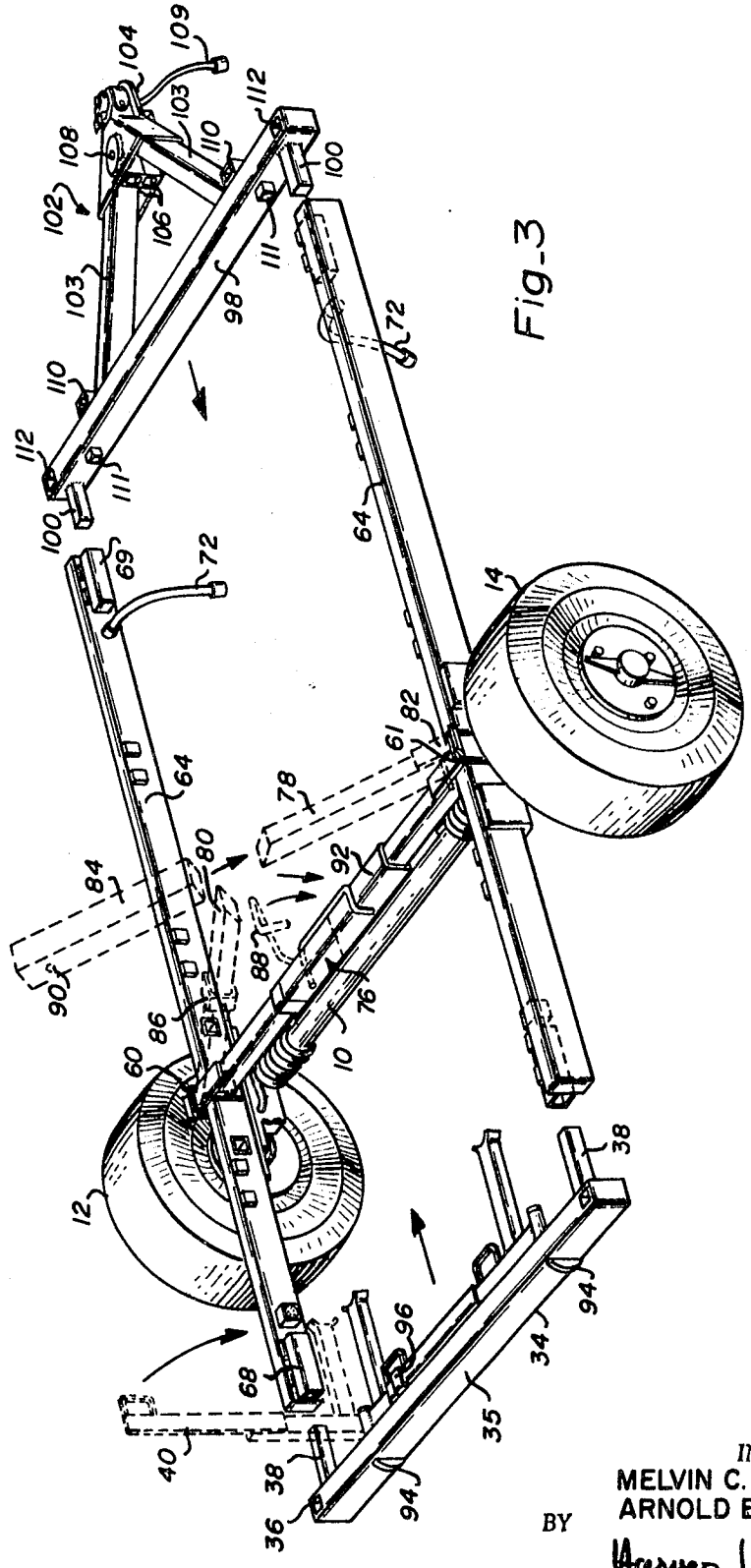


Fig. 3

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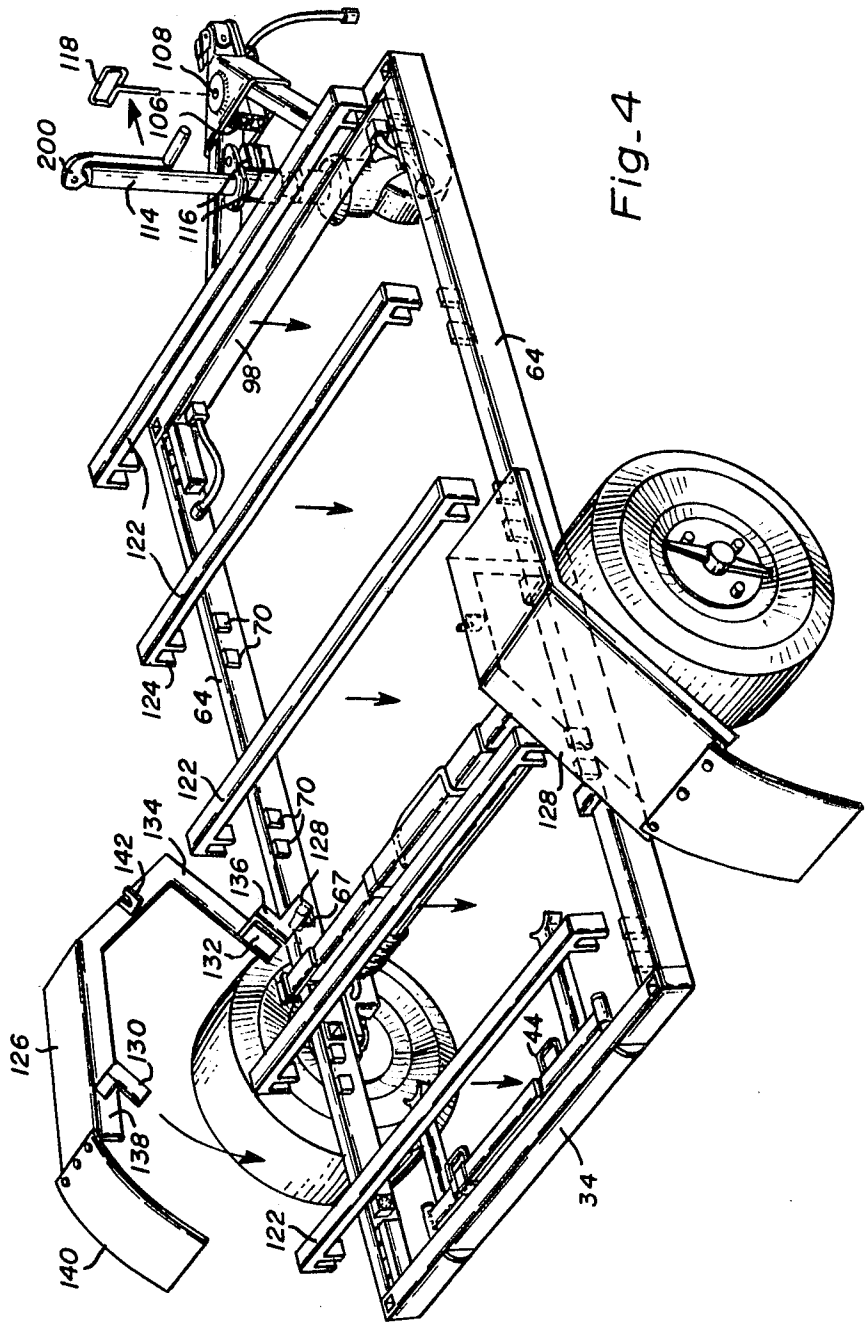


Fig. 4

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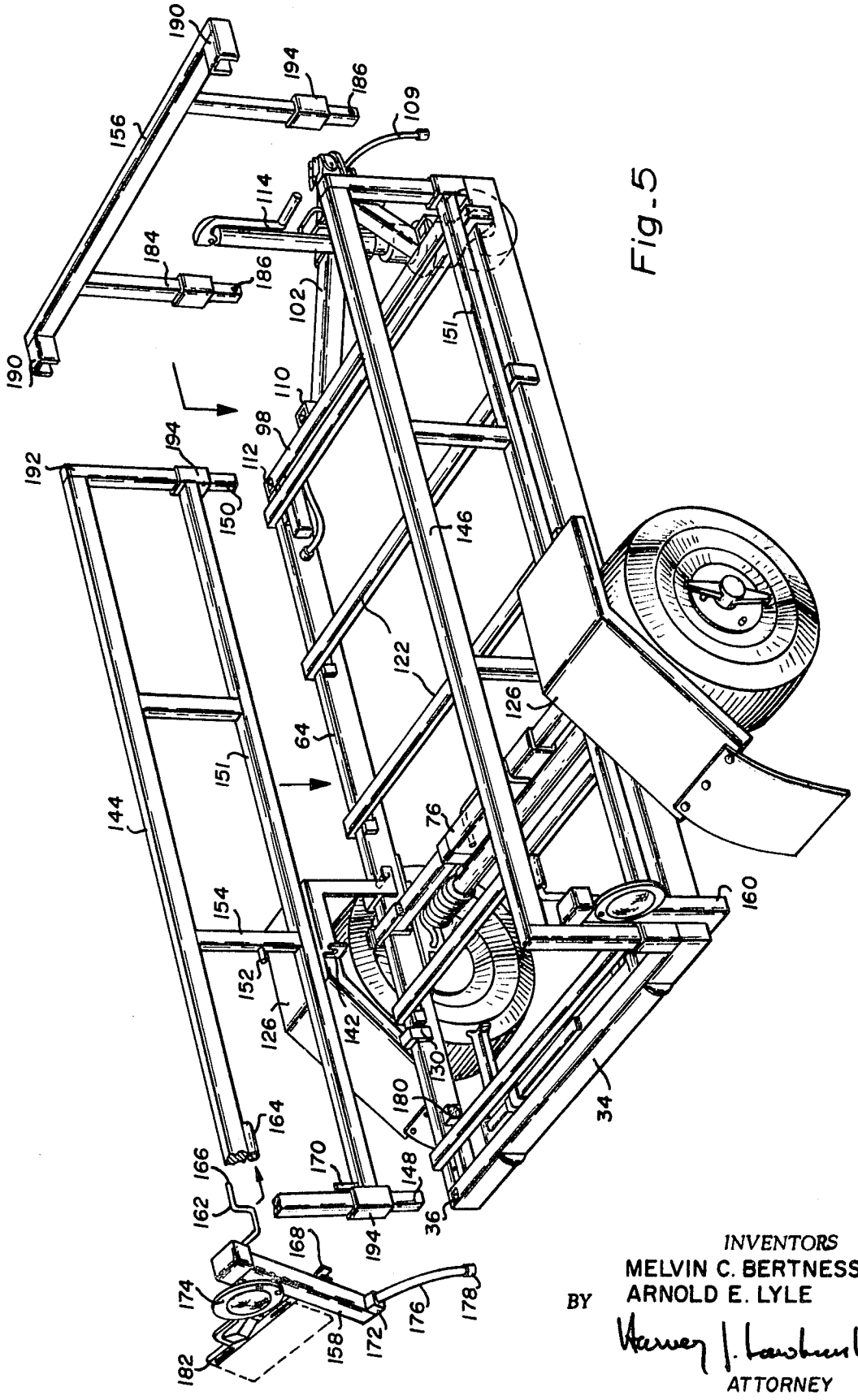


Fig. 5

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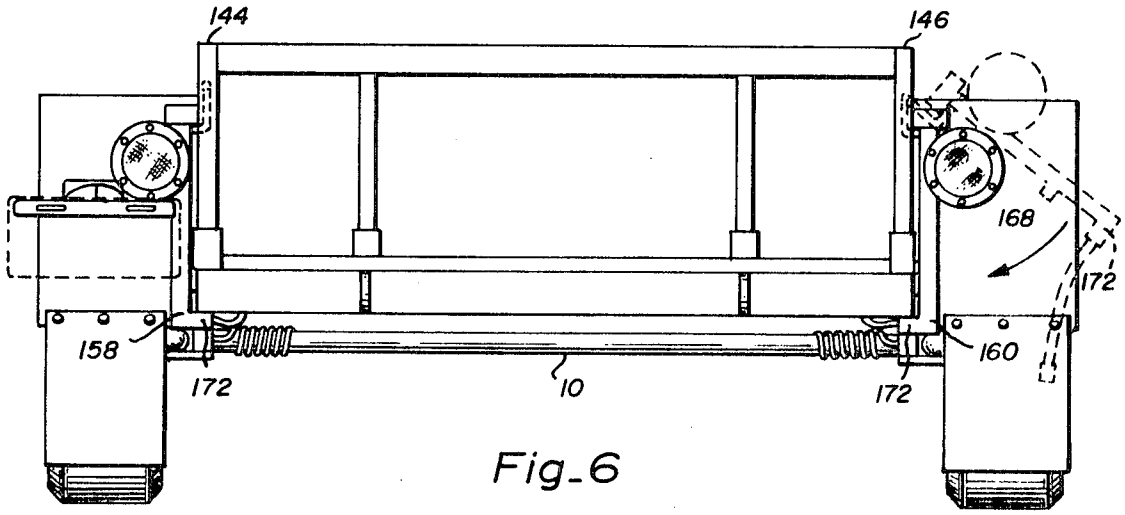


Fig_6

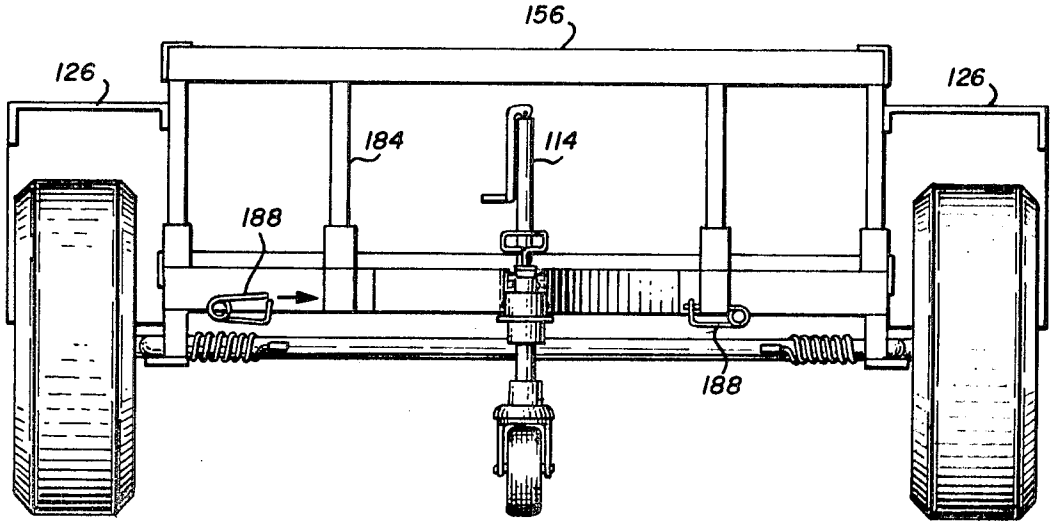


Fig_7

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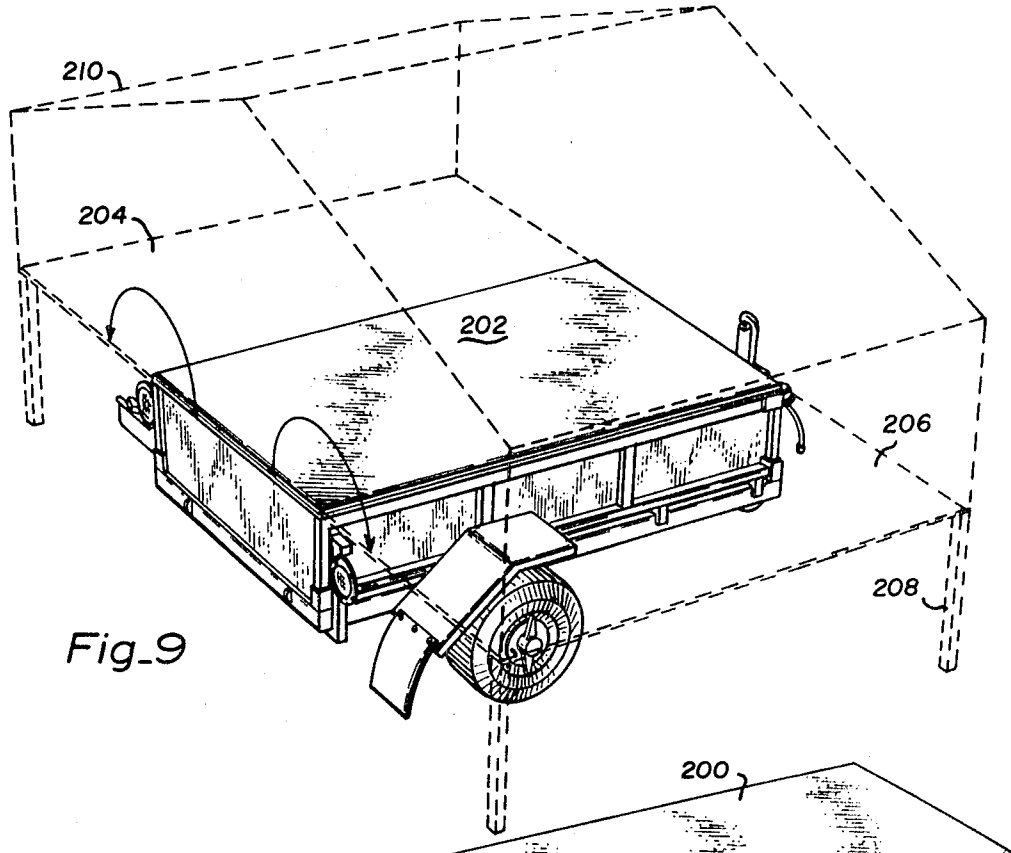


Fig_9

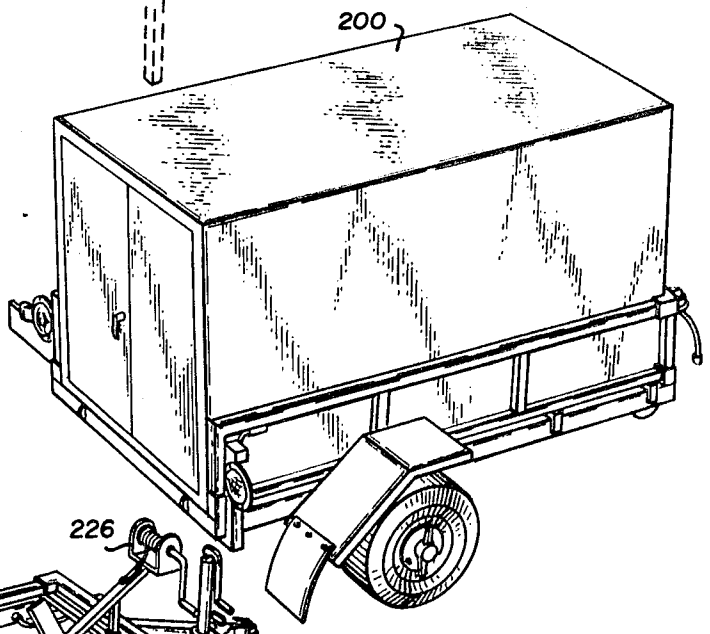


Fig_8

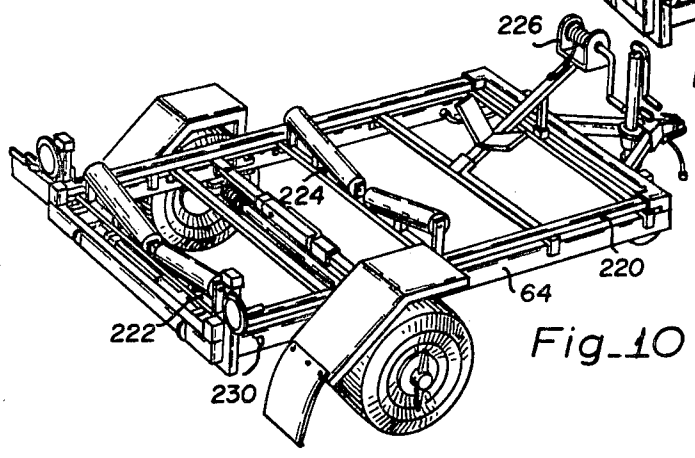


Fig_10

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COLLAPSIBLE TRAILER APPARATUS

BACKGROUND OF THE INVENTION

The present invention relates generally to vehicle trailer apparatus and, more particularly, to a collapsible trailer apparatus which can be easily assembled and disassembled without the use of tools not themselves forming a part of the apparatus.

One of the primary disadvantages of owning a trailer in today's modern environment centers about what is to be done with the trailer when it is not in use. For example, the modern subdivision homeowner having a trailer must allocate either a large part of his garage, driveway or yard for the storage of a trailer which may be infrequently used. Moreover, besides the space taken up by such apparatus, it frequently presents an eyesore to the neighborhood and is additionally undesirable from their standpoint.

Another area in which the present-day trailer is widely used but has disadvantages similar to those mentioned above is in the rental business. This field, however, has an additional problem; namely, that of transporting the various units back to some base after they have been used on a one-way rental. Typically, the return trip is made by truck or train. This is quite expensive, however, since only so many trailers can be loaded onto a given size truck and even though the truck could possible carry more weight it is space limited. Since most of the volume of shipping space displaced by a trailer is attributable to the hauling compartment, it can readily be seen that a substantially larger number of collapsed units than assembled units could be shipped in the same carrier now used.

OBJECTS OF THE PRESENT INVENTION

It is therefore a primary object of the present invention to provide a novel trailer apparatus which can be easily assembled and disassembled and the parts stored in a substantially smaller area than that required by the trailer in assembled form.

Another object of the present invention is to provide a novel trailer apparatus having a plurality of interlocking parts which can be assembled in a predetermined sequence so as to eliminate the need for bolts, screws or other conventional fastening means.

Still another object of the present invention is to provide a novel collapsible trailer apparatus having general utility and which is lightweight in construction, sufficiently rigid to serve its intended function, and includes a plurality of components each of which are light enough to be easily handled by the average person.

Still another object of the present invention is to provide a novel trailer apparatus having a plurality of specifically defined components which, when assembled in a predetermined sequence, interlock to form the superstructure of a trailer having general application.

Still another object of the present invention is to provide a novel trailer assembly including a plurality of interlocking component parts and alternative component parts which may be assembled in a predetermined sequence to form a vehicle having certain desired characteristics.

SUMMARY OF THE PRESENT INVENTION

In accordance with a preferred embodiment of the present invention, a novel trailer assembly is provided which includes a plurality of lightweight, rigid components which, when assembled in a predetermined order, interlock to form the superstructure of a trailer vehicle which can be fully assembled by a person of average strength and dexterity without the use of tools and without the use of bolts, screws or other ordinary fastening means.

A principal advantage of the present invention is that a trailer assembly is provided which can be stored in a very small space, and which can be assembled in a few minutes prior to the use thereof, and then after use be quickly disassembled and stored until a subsequent need arises. Depending, of course, on the size of the trailer, the storage space required to accommodate the disassembled trailer apparatus should be substantially less than the gross size of the assembled trailer.

Another advantage of the present invention is that certain ones of the component parts can be modified to convert the trailer from a general utility configuration to a special purpose configuration. For example, a flatbed embodiment suitable for hauling trash or various objects, can be quickly converted into a camper trailer or an enclosed trailer by merely adding certain additional components, whereas an embodiment suitable for conveying a boat, race car, tractor or other specific device will normally require the substitution or addition of certain special purpose parts to the general utility configuration.

Perhaps the most significant advantage, however, is the simplicity of assembly and short time required to assemble the apparatus of the present invention.

Other advantages of the present invention will become apparent to those skilled in the art after having read the following detailed disclosure of a preferred embodiment which is illustrated in the several figures of the drawing.

IN THE DRAWINGS

FIG. 1 is a perspective view showing a preferred wheel and axle assembly and the manner in which the main frame members are attached thereto.

FIG. 2 is a detail taken along the line 2—2 of FIG. 1 showing the spring suspension mechanism of the axial assembly.

FIG. 3 is a schematic illustration showing the manner in which the end frames and a midframe member are assembled.

FIG. 4 illustrates the manner in which a plurality of bed support crossmembers, fenders and a front wheel assembly are attached to the main frame of the trailer.

FIG. 5 illustrates the manner in which side and front rail members and taillight assemblies are mounted to the trailer apparatus.

FIG. 6 is a rear end view of the assembled trailer apparatus.

FIG. 7 is a front end view of the assembled trailer apparatus.

FIG. 8 illustrates a van embodiment of the present invention.

FIG. 9 illustrates a camper embodiment of the present invention.

FIG. 10 illustrates a boat hauling embodiment of the present invention.

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

Referring now to FIG. 1 of the drawing, there is shown an axle assembly **10** having a wheel **12** mounted to one end thereof and a second wheel **14** separated from the other end to illustrate the manner of attachment. Although any suitable axle structure can be utilized in accordance with the invention, we have found that the illustrated axle assembly, which may be purchased commercially, is very well suited to the embodiment of the invention to be illustrated herein. The axle assembly **10** is comprised of a solid steel bar **11** the ends of which include 90° bends **16** and **18** as illustrated in FIG. **2** of the drawing. A bearing mounted hub **20** is provided at each end of the axle, and is preferably of the "racing wheel" spinner hub type so that the wheels **12** and **14** can be mounted without the use of a lug wrench.

The main portion bar **11** of the assembly **10** is journaled through mounting brackets **22** each having a pair of holes **24** through which mounting bolts may be passed. The brackets **22** includes a flange **25**, one end of which passes beneath the bend **18** and the other of which is affixed to the end **26** of a steel coil spring **28** loosely wound about the axle **10**. The other end **30** of the spring **28** is affixed to the axle at **31**. Thus, it will be seen that with a wheel mounted to the hub **20**, a downward force applied to the top of bracket **22** will cause bar **11** to tend to rotate in the direction of anode **13** causing the flange **25** to apply a counter force to the end **26** of the spring **28** which in

resisting the rotation provides resilient suspension for the system.

The method of assembly of the trailer superstructure of the present invention will now be described, referring first to FIG. 1. Since the axle assembly **10** is quite heavy and since it would otherwise be quite difficult for one person to mount the wheels thereto, the rear end frame member **34** has been adapted in accordance with the invention (as shown at **32**) to serve as a temporary axle support until the wheels **12** and **14** are mounted to the axle assembly **10** and the side frame members **64** are in place.

The end frame member **34** is formed of a hollow beam having a rectangular transverse passageway **36** provided through each end. Also provided near each end are male coupling elements **38** projecting from one side of the frame member **34** and offset from the ends thereof for reasons which will be explained below. Pivotally mounted to the same side of the frame member **34**, in spaced-apart relationship, are a pair of axle supports **40** and **42** each of which include a handle portion **44** and an axle supporting member **46**. The members **46** are affixed to the handle portions **44** and spaced from the pivots **48** a sufficient distance so that when the axle assembly **10** is positioned on the support members **46**, force moments will be exerted on the supports **40** and **42** causing the handle portions **44** to bear against the ground so that the axle assembly **10** will be supported above the ground slightly higher than the radius of each wheel.

With axle assembly **10** so positioned, the side frame mounting members **50** are mounted to the brackets **22** by passing bolts **52** through the holes **24** in the brackets **22** and threading them into the threaded holes **54** in the bottom portion of the members **50**. As illustrated IN FIG. **1**, the members **50** are comprised of a flat lower plate **56** having a pair of sideplates **58** affixed to an edge thereof and an inverted U-shaped fastening member **60** affixed to the edge of the plate **56** midway between the sideplates **58**. Affixed to the plates **58** and projecting laterally therefrom over the plate **56** are a pair of male coupling elements **62** (first coupling elements).

With the members **50** secured to the axle assembly **10**, the side frame members **64** may be mounted thereto. The frame members **64** have coupling passageways **66** (second coupling elements) passing therethrough for receiving the coupling elements **62** of the members **50**. Affixed to each end of the side frame members **64** are female coupling elements **68** and **69** (third and fourth coupling elements, respectively) which are welded to a pair of spaced-apart metal pads **70** which are welded to the side of the frame members **64**. Similar pairs of pads **70** are also provided along the inside walls of the frame members **64** at spaced intervals along the length thereof for reasons which will be explained below. In order to provide electrical connections for tail lights and turn indicators, cables **72** are passed through the side frame members **64** from points **73** at the front ends as shown, and terminate near the rear end at sockets **74**.

After the two side frame members **64** have been mated with the members **50**, they are locked in place by a crossmember assembly **76** which includes two members **78** and **80** as shown in FIG. **3**, the combined lengths of which are equal to the spacing between the side frame members **64**. Affixed to the top side of one end of each of the members **78** and **80** are fastening elements **82** the outside ends of which are curved upwardly and extend beyond the ends of the members **78** and **80** as indicated.

In order to lock the side frame members **64** in place on the axle assembly, the curved end of the element **82** of member **78** is projected across the top of one of the frame members **64** and inserted through the U-shaped fastening element **61**. A sleeve **84** is then slipped over the other end of member **78** and the member **78** is rotated into the horizontal position as illustrated. Member **80** is then similarly caused to engage the fastener **60** and is rotated into its horizontal position. It will be noted that the adjacent ends of the members **78** and **80** are beveled so as to mate with one another. After the members **78** and **80** have been rotated into the horizontal position, the sleeve **84** is slid onto the member **80** until it engages a stop **86**. A locking pin **88** is then inserted through holes **90** in the sleeve and member **80** is rotated into its locking position as indicated at **92**.

Once the wheels **12** and **14** and the side frames **64** have been mounted to the axle assembly **10** and are firmly secured in place, the assembler grasps the handles **44** and raises them causing the assembly to be shifted forward rolling on the projections **94** affixed to the side **35** of the rear end frame member **34**. AS the assembly is rolled forward, the axle assembly **10** is lowered to the ground and the rear end frame member **34** may be removed. The handle portions **44** are then rotated parallel to the member **34** to engage the stop **37** (see FIG. **1**) and a suitable clip means **96** is fastened thereover to secure the members **40** in that position and prevent subsequent rattling. The end frame member **34** is then mated to the side frames **64** by inserting the male elements **38** (fifth coupling elements) into the female elements **68** and pushing the frame member **34** into engagement with the ends of frame members **64**.

The front end frame member **98** is then likewise mounted to the side frame members **64** by inserting the male elements **100** (sixth coupling elements) into the female elements **69**. The front end frame member **98** has a trailer hitch assembly **102** affixed to the front side thereof including the socket component **104** of a ball-and-socket trailer hitch. Extending from between the apex of the members **103** are a pair of vertically stacked female coupling elements **106** through which a pin receiving hole **108** is drilled. On the forward side of the frame member **98** a pair of female coupling elements **110** are provided, and coupling passageways **112** are also provided through either end of the frame members **98**. Electrical outlets **111** are provided on the rear side of frame member **98** and the conductors leading thereto extend through members **103** and emerge behind the hitch socket **104**.

Turning now to FIG. **4**, after the end frame member **34** and **98** are installed, a front wheel assembly **114** is mounted to the hitch assembly **102** by inserting the male coupling elements **116** into the female elements **106**, and the assembly **114** is locked in place by inserting a pin **118** through the hole **108** and coinciding holes in the elements **116**. The front wheel assembly **114** has a crank **120** at the top thereof which enables the front wheel to be lowered when the trailer is not attached to a pulling vehicle, but to be raised when the trailer is so attached for transit. After the wheel assembly **114** is in place and the front wheel is lowered to its most extended position, the trailer frame thus far assembled will be horizontally disposed, and further assembly can take place.

The next step is to mount the crossmembers **122** to the side frame members **64** by slipping the inverted U-shaped ends **124** over the side frame members **64** at points between the pads **70**. The pads **70** thus serve to prevent the crossmembers **122** from sliding out of place along the side frame members **64**. After all of the crossmembers **122** are in place, the fenders **126** and **128** may be installed by inserting the pin **128** into the aperture **67** provided by the male coupling element **62** (see FIG. **1**) as it is extended through the hole **66** in the side frame **64**. The fender **126** can then be rotated downwardly until the flange **130** engages the side frame member **64**. While the end **132** of the fender support bar **134** combines with the offset flange member **136** to provide a U-shaped bracket for receiving the top of the frame **64**, the flange **130** likewise combines with the side **138** of the fender **126** to form a rear bracket which is slipped over frame member **64**. Although not essential, it may also be found desirable to affix a mud flap **140** to the rear edge of the fender **126**.

Once the fenders **126** have been rotated into place, a pair of side rails **144** and **146** are next installed, as illustrated in FIG. **5**, by inserting the projections **150** and **148** respectively, into the passageways **112** and **36** (seventh coupling elements) in the front and rear end frame member (eighth coupling elements), respectively. It will be noted that the side rails **144** and

146 in addition to providing sides for the trailer assembly, serve to interlock also the end frame members 34–68 and 100–69 from separating. In addition, the lower portion 151 of each side rail bears upon the top of the ends of the crossmembers 122, and prevents them from lifting off of the side frame members 64. The flanges 130 and 136 of the fenders 126 are likewise engaged by the lower rail portion 151, and are thereby secured to the side members 64.

In order to give further stability to the fenders 126, pins 152 projecting from the vertical members 154 of the side rails 144 and 146 engage hooks 142 affixed to the inside edges of the fenders as the side rails 144 are slipped into place. This fastening engagement presents lateral movement of the tops of the fenders. It will be noted that with the side rails 144 and 146 in place, all of the previously assembled components are now rigidly locked in place.

The side rails 144 and 146 are then themselves locked in place by the installation of a front rail member 156 and a pair of light mount members 158 and 160. The members 158 and 160 include preformed pivot bars 162 affixed to the top of the members and which are adapted for insertion into cylindrical sleeves 164 welded to the bottom side of the upper portions of the side rails 144 and 146. With the member 158 tilted in a position similar to that shown in FIG. 5, the end 166 of bar 162 may be inserted into the sleeve 164, and the member 158 may then be rotated downwardly turning thereabout until it engages the side rail 144 at which time a resilient clip means 168 affixed to member 158 engages a pin 170 extending upwardly from the lower portion 150 of rail 144. When clip 168 engages pin 170, it locks the member 158 in place.

The lower end of the member 158 has a projection 172 (see also FIG. 6) extending laterally therefrom so as to pass under the side frame member 64 and engage the bottom surface thereof. The members 158 and 160 thus serve to prevent the rear ends of the rails 144 and 146 from becoming uncoupled from the end frame member 34. Taillamp assemblies 174 are mounted to the outer sides of members 158 and 160 and the electrical wiring leading thereto are passed through the members and emerge from the end of the projections 172 as illustrated at 176. The electrical cable 176 terminates in a plug 178 which may be plugged into the socket 180 to complete an electrical path from the lights 174 through the side frame members 64 and the hitch assembly 102 to the plug 109 for coupling to the electrical system of the pulling vehicle. A license plate mounting bracket 182 is also mounted to the member 158.

The front rail 156 is used to secure the front ends of the side rails 144 and 146 to the lower frame structure and includes a pair of vertical members 184 the ends of which are adapted for being received within the female coupling elements 110. Holes 186 are provided through the lower end of the members 184 and elements 110 for receiving locking pins 188 as more clearly shown in FIG. 7 of the drawing. The ends of the rail 156 are turned toward the rear and are channel shaped as indicated at 190 for slipping over the top edge of the corners 192 of the rails 144 and 146. Since the rail 156 is locked in placed by the pins 188, it prevents the front ends of the side rails 144 and 146 from being dislodged from the apertures 112 in the main frame assembly. The enlarged portions 194 of the various vertical rail members merely provide stops for preventing the vertical members from passing into the receiving apertures more than the desired predetermined distances.

It will thus be seen that once the light assemblies 158 and 160 are in place and the front rail 156 has been positioned with the pins 188 in place, the entire trailer superstructure is interlocked and rigidly held together. It will be noted that with the exception of the bolts used to fasten the side frame mounting members 50 to the axle assembly, no tools whatsoever have been required to assemble the device. Since the members 50 do not present a storage problem when left bolted to the axle bracket 22, they may either be left affixed to the bracket 22, or may be removed. This is not to be considered contrary to the no tool assembly principle of the present invention, but it is merely a way in which to allow the invention to incorporate a commercially available axle assembly. Alternatively, it would be a simple matter to provide an axle assembly having a bracket modified to incorporate the operative components of the members 50.

In order to disassemble the trailer, the parts are removed in the reverse order. That is, the pins 188 are first removed, then the front rail 156 and the taillight assemblies 158 and 160 are detached. Next, the side rails 144 and 146 are lifted out of place allowing the fenders 126 and crossmembers 122 to be removed. Next, the pin 118 is pulled and the front wheel assembly 114 is removed and the front and rear frame members 98 and 34 are pulled apart so as to disengage the side members 64. The axle support 40 and 42 of the rear frame member 34 are then rotated into their extended position and the vertical members 46 are placed under the axle assembly 10. The handles 44 are then pushed down to the ground lifting the axle assembly into its mounted position. Next, the crossmember assembly 76 is disconnected and removed freeing the side members 64 which may then be removed. As this point, the wheels 12 and 14 can be detached from the axle assembly 10 by removing the spinners 15 and pulling them from the hubs 20. The axle assembly can then be lifted from the support, the supports 40 and 42 can be rotated back into the closed position and the entire assembly stored.

In order to provide a floor for the trailer assembly previously described, a single sheet of plywood can be provided with clips affixed to the bottom thereof for engaging the crossmembers 122. Alternatively, two or more sections of plywood or other suitable material can be provided with similar clips affixed to the bottom side thereof so as to better facilitate handling and storing when the trailer is disassembled. The plural pieces may either be independent of each other or be hinged together in a suitable manner.

Where the present invention is to be utilized to haul particulate matter such as sand or other small objects, it may be desirable to provide plywood side and end panels which can also be clipped or otherwise fastened to the side and end rails. SEveral of these pieces may even be hinged together or hinged to the floor panels. Numerous combinations are foreseen to aid in storage and assembly.

Although only one size and type of trailer has thus far been illustrated, it is to be understood that the length thereof can be of any suitable dimension in keeping with the particular application and strength of the materials utilized for the component parts. For example, a relatively small model for light homeowner-type hauling might be made of lightweight aluminum, other metal stock, fiber glass, or even wood, for that matter. However, a larger model to be used for heavy duty hauling would necessarily require that heavier duty materials be used. The basic structural principle of interlocking components, however, should remain the same.

Although the invention has thus far been discussed with relation to a specific general use embodiment, it is to be understood that the invention can be modified into many forms by mere substitution or addition of specialized components. For example, several embodiments which are visualized by the inventors are illustrated in FIGS. 8, 9 and 10. In FIG. 8, where it is desired to provide a closed walk-in-type trailer, it would be a simple matter to provide a simple knockdown-type enclosure 200 made of plywood, sheet metal, fiber glass or other suitable materials, which is designed to fit onto the superstructure previously described. In the alternative, the enclosure 200 might be a permanently assembled structure which could be used by the homeowner as an outdoor storage room, and then simply be lifted onto the assembled trailer superstructure and be secured thereto to provide an enclosed trailer.

In another example shown in FIG. 9, the previously described superstructure could be combined with a collapsible camper structure 202 formed of a relatively shallow container made of wood or other suitable materials, and dimensioned to fit onto the previously described trailer superstructure. Such a device might have full width upper doors 204 and 206 which

could be rotated outwardly, and be supported by legs **208** to provide a sleeping shelf covered by a tent structure **210** of the type commonly used in present-day compact camper trailers. However, in the case of the present invention since the trailer superstructure can be disassembled, the removable camper compartment **202** could be stored by standing it on end against a garage wall so as to be out of the way when not in use. Alternatively, the camper compartment itself may be made in such a way that it also can be disassembled for storage.

A trailer, such as shown somewhat foreshortened in FIG. **10**, for hauling a boat might also be provided in accordance with the present invention by merely reducing the height of the side rails **220**, and adding a pair of roller supporting cross members **222** and **224**, and a wench assembly **226** which are held in place by the side rails **220** in the same manner as are the crossmembers **122** in the previously described embodiment. In this case, eyelets **230** would be provided at the sides of the frame members **64** for accommodating standard cross-the-top, boat securing devices long used on boat trailers. It would thus be seen that one owning a trailer of the type first described can easily modify the same for other purposes by merely making or purchasing additional special purpose attachments.

After having read the above disclosure, it will be apparent to those of skill in the art that many alterations and modifications can be made to the subject invention without departing from the merits thereof. It is therefore to be understood that this description is for purposes of illustration only, and is in no way intended to be limiting. Accordingly, it is intended that the appended claims be interpreted as covering all modifications which fall within the true spirit and scope of the invention.

What is claimed is:

1. A collapsible trailer assembly, comprising:

an axle assembly;

a pair of mounting members affixed to said axle assembly in spaced-apart relationship, each of said mounting members including a first coupling element;

a pair of elongated side frame members, each side frame member including, a second coupling element disposed intermediate the ends thereof, a third coupling element disposed at one end thereof, and a fourth coupling element disposed at the other end thereof, said second coupling elements matingly engaging said first coupling elements;

a rear frame member including fifth coupling elements matingly engaging said third coupling elements;

a front frame member including sixth coupling elements matingly engaging said fourth coupling elements and first locking means for locking said front frame member and said rear frame member to said side frame members.

2. A collapsible trailer assembly as recited in claim **1** and further comprising a crossmember assembly including second locking means for locking said frame members to said mounting members.

3. A collapsible trailer assembly as recited in claim **1**, wherein said front frame member and said rear frame member each include seventh coupling elements, and said first locking means includes a pair of side rails having eighth coupling elements at each end thereof for matingly engaging said seventh coupling elements.

4. A collapsible trailer assembly as recited in claim **3**, and further comprising a front rail including second locking means for locking said side rails to said front frame member.

5. A collapsible trailer assembly as recited in claim **4**, and further comprising a pair of light mounting members including third locking means for locking said side rails to said rear frame member.

6. A collapsible trailer assembly as recited in claim **5**, wherein at least one of said light mounting members, one of said side frame members, and one of said front frame members include interconnectable electrical cables for providing electrical communications between the front end and the rear end of said trailer assembly.

7. A collapsible trailer assembly as recited in claim **3**, and further comprising a pair of fenders each including means matingly engaging said side frame members, said side rails being operative to lock said fenders to said side frame members.

8. A collapsible trailer assembly as recited in claim **3**, and further comprising a plurality of elongated cross-frame members including means at each end matingly engaging said side frame members, said side rails being additionally operative to lock said cross-frame members to said side frame members.

9. A collapsible trailer assembly as recited in claim **8**, wherein at least one of said cross-frame members includes means specially adapted to facilitate the loading and carriage of a specialized piece of equipment to be carried by said trailer assembly.

10. A collapsible trailer assembly as recited in claim **1**, and further comprising a trailer hitch assembly coupled to said front frame member.

11. A collapsible trailer assembly as recited in claim **1** and further comprising a wheel assembly coupled to said front frame member.

12. A collapsible trailer assembly as recited in claim **1** and further comprising an enclosure means coupled to said frame members.

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