

Jan. 25, 1966

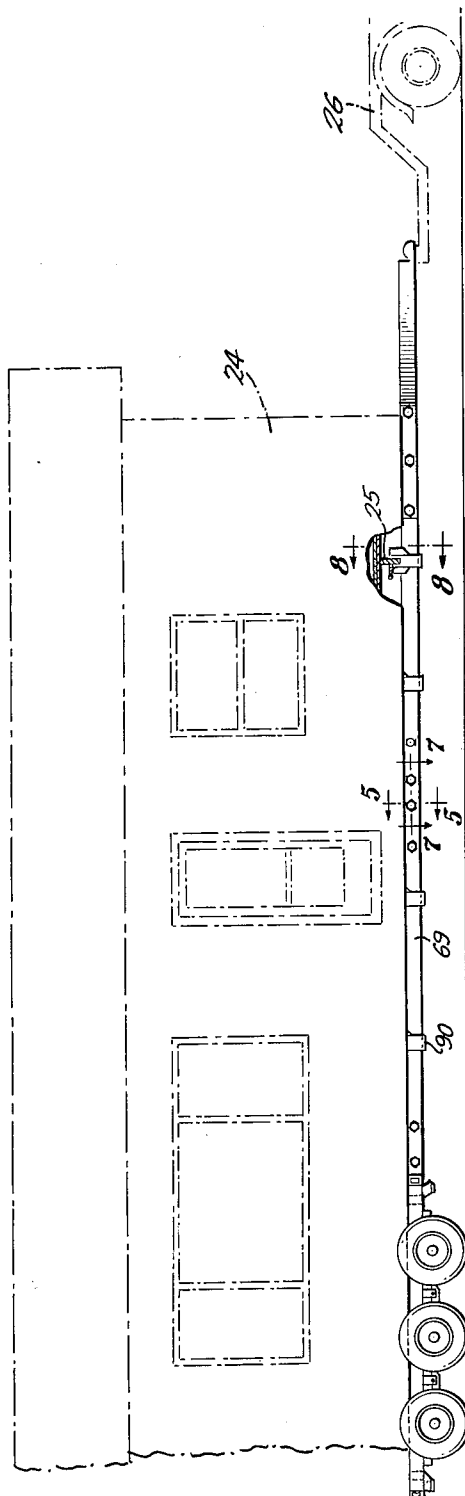
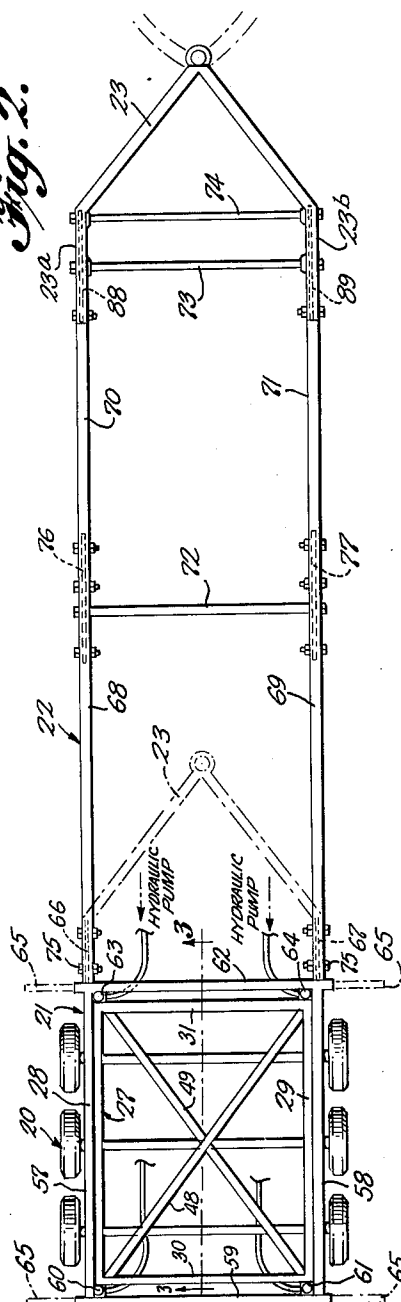
J. D. POWELL

3,231,121

SYSTEM FOR TRANSFERRING STRUCTURES

Filed Sept. 16, 1963

5 Sheets-Sheet 1



Jan. 25, 1966

J. D. POWELL

3,231,121

SYSTEM FOR TRANSFERRING STRUCTURES

Filed Sept. 16, 1963

5 Sheets-Sheet 2

Fig. 3.

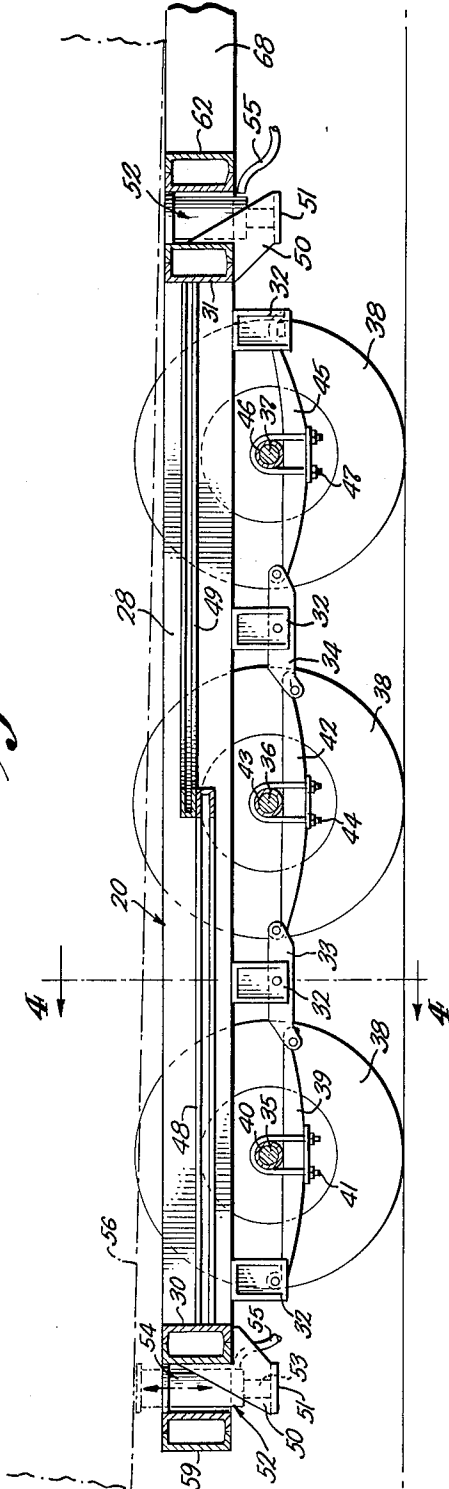
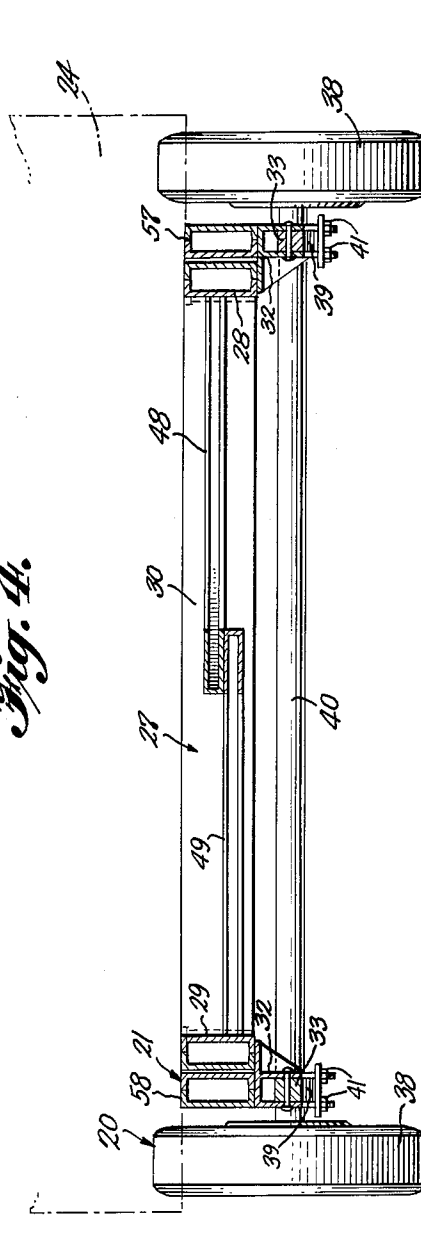


Fig. 4.



INVENTOR
John Dillard Powell

BY
Mason, Fenwick & Lawrence
ATTORNEYS

Jan. 25, 1966

J. D. POWELL

3,231,121

SYSTEM FOR TRANSFERRING STRUCTURES

Filed Sept. 16, 1963

5 Sheets-Sheet 3

Fig. 5.

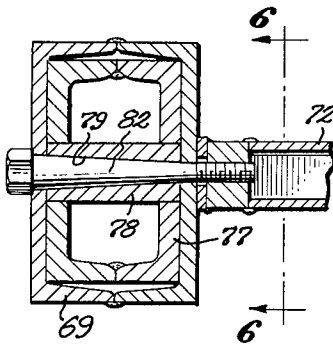


Fig. 6.

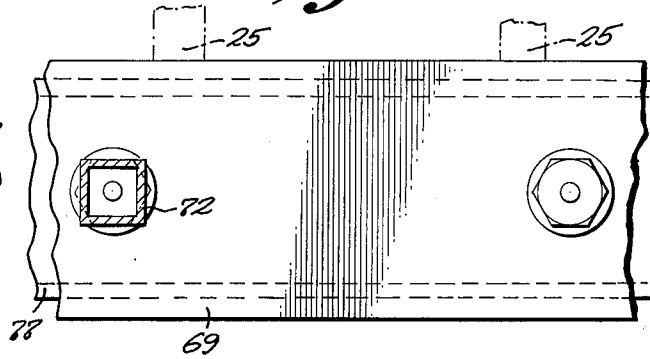


Fig. 7.

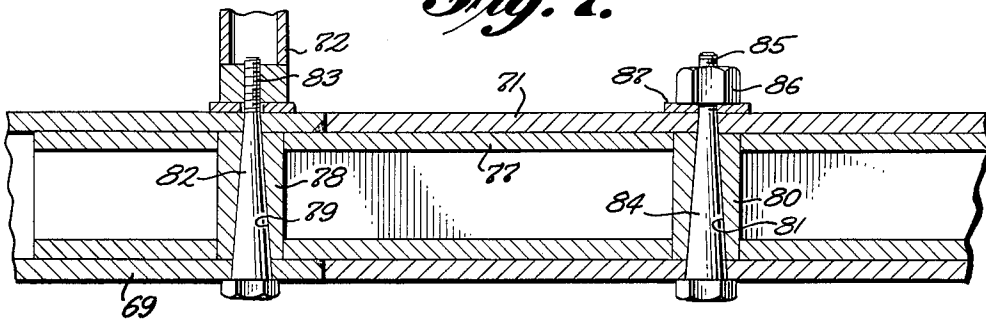


Fig. 8.

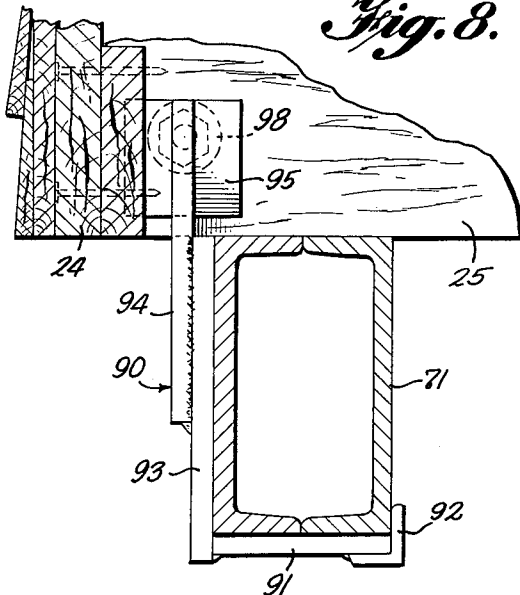
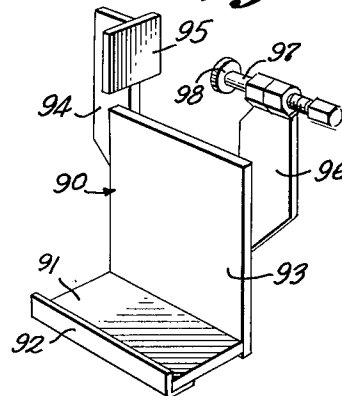


Fig. 9.



INVENTOR

John Dillard Powell

BY *Mason, Fenwick & Lawrence*
ATTORNEYS

Jan. 25, 1966

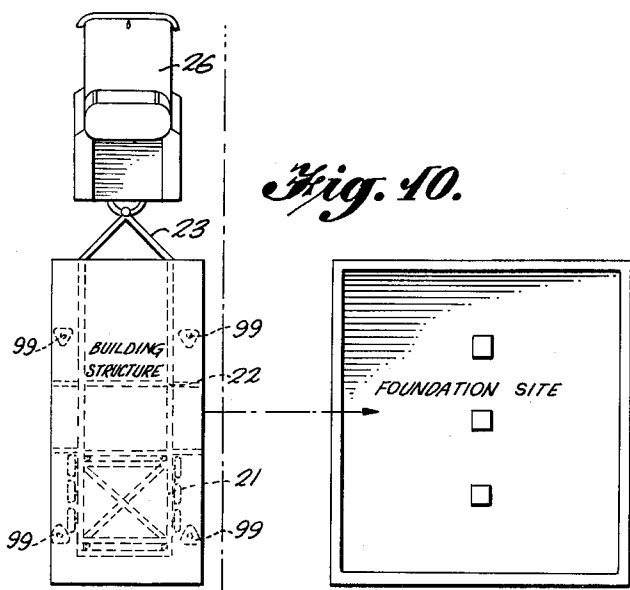
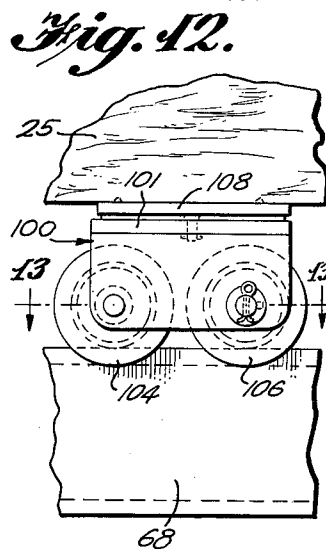
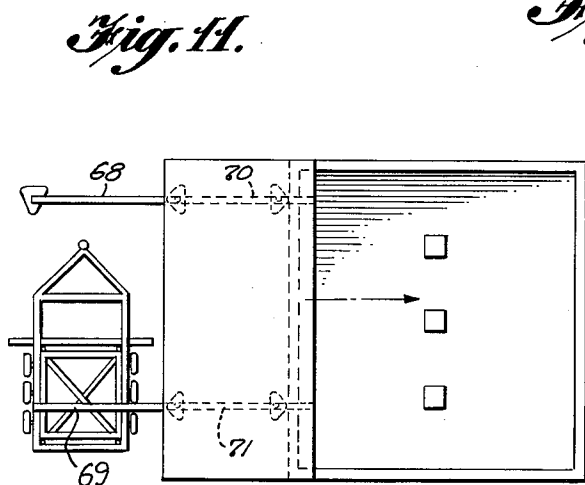
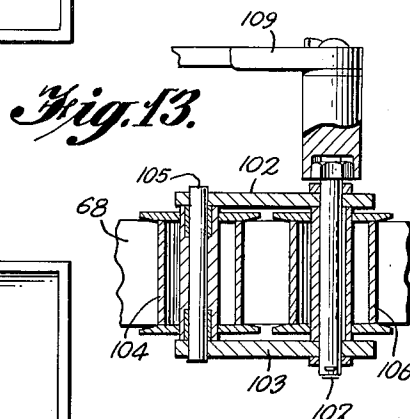
J. D. POWELL

3,231,121

SYSTEM FOR TRANSFERRING STRUCTURES

Filed Sept. 16, 1963

5 Sheets-Sheet 4



INVENTOR

John Dillard Powell

BY
Mason, Fenwick & Lawrence
ATTORNEYS

Jan. 25, 1966

J. D. POWELL

3,231,121

SYSTEM FOR TRANSFERRING STRUCTURES

Filed Sept. 16, 1963

5 Sheets-Sheet 5

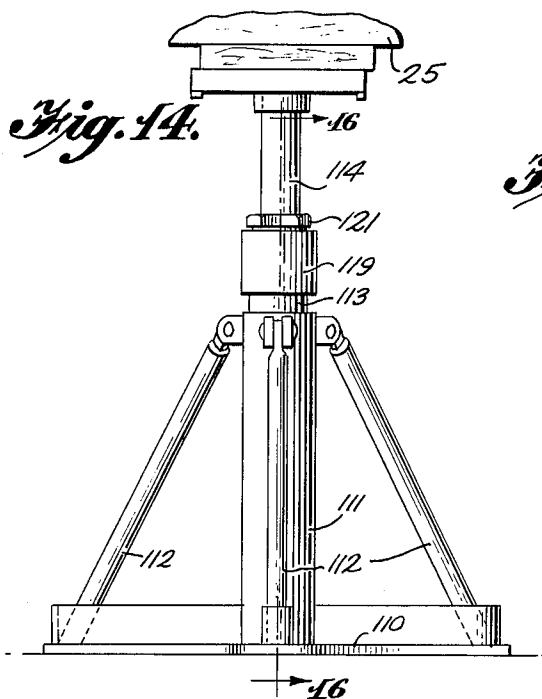


Fig. 16.

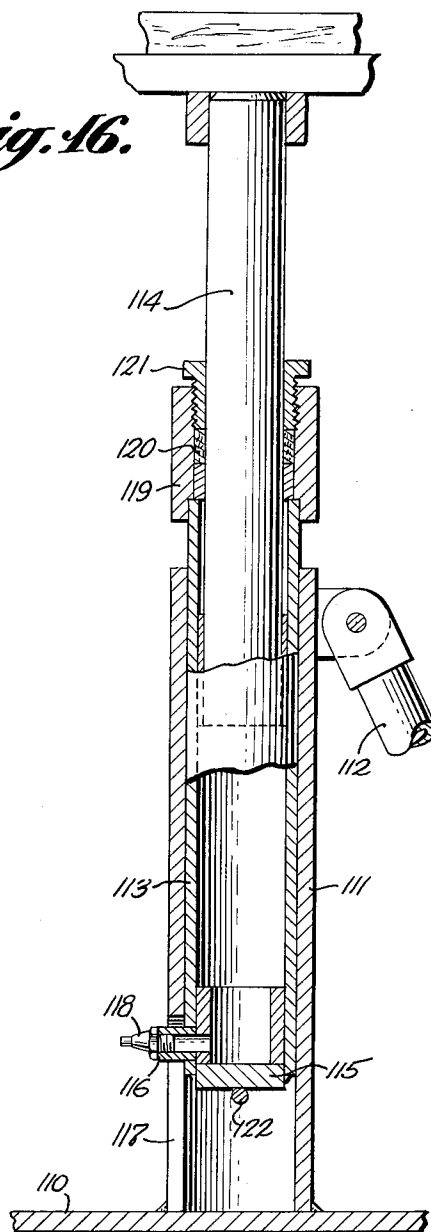
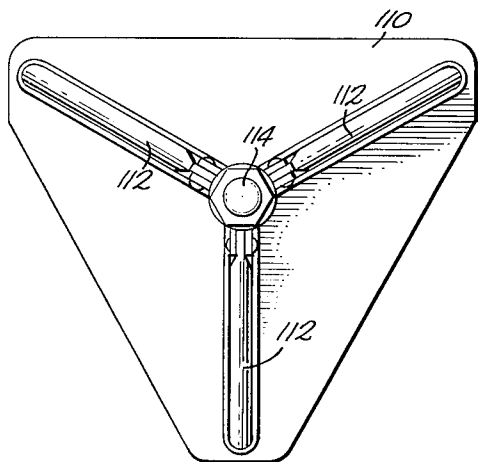


Fig. 15.



INVENTOR

John Dillard Powell

BY *Mason, Fenwick & Lawrence*
ATTORNEYS

1

3,231,121

SYSTEM FOR TRANSFERRING STRUCTURES

John Dillard Powell, Ridgeway, Va., assignor to Continental Homes, Incorporated, Boones Mill, Va., a corporation of Virginia

Filed Sept. 16, 1963, Ser. No. 308,973

9 Claims. (Cl. 214-515)

This invention relates to a transfer system and more particularly to a transfer system including a trailer suitable for transporting a prefabricated building structure from a prefabrication site to a final assembly site, having at least one component thereof convertible into a track means for transferring the building structure from a selected location adjacent the foundation site onto the foundation site. This invention also contemplates a novel method of transferring a structure from a given location to a selected location.

In the building construction industry it has been found that the construction costs of smaller buildings such as homes and the like can be reduced considerably by pre-cutting, pre-forming or prefabricating many of the component units at prefabrication sites, utilizing mass production techniques, and transporting such units to job sites for final assembly. This practice in the industry further has progressed to the stage where entire homes are prefabricated and transported in sections to job sites for final assembly.

One of the most significant limitations in this relatively new practice has been in the transportation of the prefabricated building structures from the prefabrication site to the job site, which is usually by truck and trailer, and transferring the building structure from the trailer onto the foundation site, which usually is performed by means of a crane apparatus. Most of the trailers in the prior art have not been found to be entirely satisfactory for use in the transportation of such structures, in that they are not sufficiently suitable to bear the weight of such structures under dynamic load conditions, to readily negotiate the varying course and grades of roadways and to avoid the development of stresses and strains in the prefabricated structures during the transportation of such structures. In addition, with the use of such trailers, additional means always are required for transferring the structures from the trailer onto the foundation site. The requirement for such a separate means for transferring the structures from the trailer onto the foundation of the structure has been found to cause considerable delay and increase in cost in the construction of such structures.

Accordingly, it is the principal object of this invention to provide an improved transfer system.

Another object of this invention is to provide an improved transfer system for transporting prefabricated building structures from a prefabrication site to a job site where such structures are to be finally assembled.

A further object of this invention is to provide an improved transfer system including a trailer for transporting prefabricated building structures from a prefabrication site to a selected location site where the structure is to be finally assembled, having at least a component thereof convertible to a track means for transferring the building structures from the trailer onto the foundation site.

A still further object of this invention is to provide an improved trailer for transporting a prefabricated building structure from a prefabrication site to a selected site where such structure is to be finally assembled, having at least a component thereof convertible to a track means for transferring the structure from the trailer onto the foundation of the final building structure, which does not

2

require any additional apparatus for transferring the building structure from the trailer onto the foundation.

Another object of this invention is to provide an improved trailer for transporting a prefabricated building structure which is suitable for supporting such building structure under dynamic load conditions.

A further object of this invention is to provide an improved trailer for transporting building structures which is adapted to readily negotiate a varied course and grades in roadways.

A still further object of this invention is to provide an improved trailer for transporting a building structure from a prefabrication site to a final assembly site, having at least a component thereof convertible to a track means for transferring the building structure from a selected location adjacent a foundation site onto the foundation site, which is simple in construction and requires a simple assembly operation.

Another object of this invention is to provide an improved trailer for transporting building structures of considerable size from prefabrication sites to selected sites where they may be finally assembled, which may be partially disassembled and converted into a track means transfer system for transferring the building structure from a selected location adjacent the foundation site onto the foundation site, and reassembled in an abbreviated form to facilitate transportation of the trailer back to the prefabrication site.

A further object of this invention is to provide an improved trailer for transporting prefabricated building structures having relatively few parts, and which is inexpensive to manufacture.

A still further object of the present invention is to provide a novel method of transferring a structure from a given location to a selected location.

Other objects and advantages of the present invention will become apparent to those persons skilled in the art, in the following description when taken in conjunction with the accompanying drawings, in which:

FIGURE 1 is a side elevational view of an embodiment of the invention illustrating a building structure mounted thereon in broken lines, and having a section of the building structure broken away;

FIGURE 2 is a top plan view of the invention;

FIGURE 3 is an enlarged cross-sectional view taken along line 3-3 in FIGURE 2;

FIGURE 4 is a cross-sectional view taken along line 4-4 in FIGURE 3;

FIGURE 5 is an enlarged cross-sectional view taken along line 5-5 in FIGURE 1;

FIGURE 6 is a cross-sectional view taken along line 6-6 in FIGURE 5;

FIGURE 7 is an enlarged cross-sectional view taken along line 7-7 in FIGURE 1;

FIGURE 8 is an enlarged cross-sectional view taken along line 8-8 in FIGURE 1;

FIGURE 9 is an enlarged perspective view of the clamping member shown in FIGURE 1;

FIGURE 10 is a diagrammatic view illustrating the building structure mounted on the present invention, positioned adjacent a foundation site prior to the transfer of the building structure onto the foundation site;

FIGURE 11 is a view similar to the view in FIGURE 10, illustrating selected components having been converted to a transfer system and the structure mounted thereon being transferred onto the foundation site;

FIGURE 12 is an enlarged view of the roller member used with the transfer system illustrated in FIGURES 10 and 11;

FIGURE 13 is a cross-sectional view taken along line 13-13 in FIGURE 12;

FIGURE 14 is a side elevational view of a jacking

unit with the transfer system illustrated in FIGURES 10 and 11;

FIGURE 15 is a top plan view of the jacking unit shown in FIGURE 14; and

FIGURE 16 is a cross-sectional view taken along line 16—16 in FIGURE 14.

In accordance with the broad aspects of this invention there is provided a transfer system including a trailer for a prefabricated building structure generally comprising a wheeled unit, carrier means mounted on the wheeled unit for supporting the building structure on the axis of the trailer, which includes support means that can be detached from the trailer and positioned along a line of travel from a selected location adjacent a foundation site onto the foundation site for supporting the building structure for travel thereon to the foundation site and means for coupling the carrier means to a suitable prime mover means.

Referring to the drawings, there is illustrated a preferred embodiment of the present invention. Referring specifically to FIGURES 1 through 4, there is generally provided a wheeled unit 20, a carrier frame 21 mounted on the wheeled unit, an elongated support frame 22 detachably secured to the front end of the carrier frame, and a coupling member 23 selectively detachably secured to the front end of the support frame 22 and the front end of the carrier frame 21. As shown in FIGURE 1, the carrier frame 21 and the support frame 22 are adapted to be attached to provide a bed for a prefabricated building structure 24, having a plurality of transversely extending, longitudinally spaced floor joists 25. In addition, it will be noted that the coupling member 23 is adapted to be coupled to a suitable prime mover means 26. Each of the frame members of the trailer are preferably formed of box beams which may be produced by welding together members having a channel-shaped cross-section with their spaced flanges in abutting relationship as illustrated in FIGURE 5.

The welded unit 20 comprises a frame member 27 having a pair of transversely spaced side members 28 and 29, a rear end member 30 and a front end member 31. Secured to the underside of the side members of the rectangular frame 29 is a plurality of laterally disposed brackets 32 having upper horizontal surfaces which provide seating surfaces for the side members of frame member 21. Mounted on the two intermediate depending brackets are hanger elements 33 and 34. The rectangular frame member 20 is supported on the axles 35, 36 and 37, having suitable wheels 38 mounted on the end portions thereof by means of leaf spring 39, which is secured to rearwardly disposed bracket 32 and hanger element 33 and supported on the axle housing 40 of axle 35 by means of a suitable hanger bolt 41, a leaf spring 42 secured at its ends to hanger elements 33 and 34 and supported on the axle housing 43 of axle 36 by means of hanger bolt 44 and leaf spring 45 secured at its ends to hanger element 34 and the forwardly disposed depending bracket 32 and supported on the axle housing 46 of axle 37 by means of a hanger bolt 47. The rectangular frame member 20 also is provided with a pair of diagonally extending cross brace members 48 and 49. The end portions of the rear end member 30 and front end member 31 are provided with depending bracket members 50, each having a horizontal shelf portion 51 disposed rearwardly and forwardly thereof, respectively. Mounted on each of the shelf portions 51 of the depending bracket members 50 is a fluid actuated device 52 having a piston member 53 rigidly secured to the shelf portion of the depending bracket 50 and a cylinder member 54 rigidly secured to the carrier frame 21. The fluid actuated devices 52 each are provided with fluid lines 55 which are connected to a suitable source of fluid under pressure, having control means preferably located at the control station of the prime mover means. It will be appreciated that the fluid actuated devices 52 can be utilized to vertically displace the carrier frame 21

relative to the wheeled unit 20, as illustrated by the broken lines 56 in FIGURE 1.

The carrier frame 21 is substantially rectangular in shape, surrounding the frame 27 of the wheeled unit and adapted to lie in the same plane therewith. The carrier frame comprises a pair of side members 57 and 58 disposed exteriorly along side members 28 and 29 of frame 27, which normally are supported on the upper surfaces of bracket members 32, a rear end member 59 spaced rearwardly from rear end member 30 of frame member 27 to accommodate laterally spaced horizontal plate members 60 and 61 rigidly secured to the carrier frame and the cylinder members of the rearwardly disposed fluid actuated devices, and a front end member 62 spaced forwardly from front end member 31 of frame member 27 to accommodate laterally spaced horizontal plates 63 and 64 which are rigidly secured to the carrier frame and the cylinder members of the forwardly disposed fluid actuated devices 52. The rear end member 59 and the front end member 62 of the carrier frame each are provided with laterally movable outrigger members 65, which can be extended laterally, as shown in FIGURE 2, to provide lateral support for the lateral extremities of the building structure 24. Disposed on the forward end of the carrier frame are a pair of forwardly extending male members 66 and 67 disposed in alignment with side members 57 and 58 of the carrier frame, respectively.

The support frame member 22 comprises a pair of transversely spaced support beams 68 and 69, transversely spaced support beam members 70 and 71 disposed in longitudinal alignment with support beam members 68 and 69, respectively, and intermediate cross beam member 72 adapted to connect the forward ends of support beam members 68 and 69. Additional cross beam members may be provided as desired. The frame member 22 is attached to the carrier frame 21 by means of the male members 66 and 67 which are received in the rearward ends of support beams 68 and 69, respectively, and rigidly secured by means of a plurality of bolts 75. As best shown in FIGURES 2, 5, 6 and 7, the support beam members 68 and 69 are provided with forwardly extending male members 76 and 77, respectively, which are received in the rearward ends of support beam members 70 and 71, respectively. As best shown in FIGURES 5 through 7, the male member 77 is preferably a box beam adapted to be received within the support beam member 71. The male member 77 is provided with a transverse member 78, having an inwardly tapered opening 79 and a transverse member 80 having an inwardly tapered opening 81. The support beam member 69 is provided with openings registered with the tapered opening 79 for receiving a tapered bolt 82 having a threaded end portion 83 which is threaded into a suitable threaded opening in the end of cross beam member 72. The longitudinally aligned support beam member 71 also is provided with openings registered with the tapered opening 81 for receiving a tapered bolt 84 having a threaded end 85 therethrough for securing the support beam member 71 rigidly to the male member 77 by means of a nut 86 threadedly mounted on the bolt 81, tightened against a washer member 87 mounted on the end of the bolt. The male member 76 on the opposite side of the support frame is provided with a similar securing assembly, as described. Similarly, the front end portions of support beams 70 and 71 are provided with forwardly extending male members 88 and 89 which are adapted to be received within aligned members 23a and 23b of the coupling member and secured thereto with the cross beam members 73 and 74 in the manner described. It will be appreciated that when the support frame member 22 is detached from the carrier frame and the cross beam members 73 and 74 are removed from the coupling member, the coupling member can be attached to the carrier member so that the male members 66 and 67 are received within and bolted to the female members 23a and 23b of

the coupling member, as illustrated in the broken lines in FIGURE 2.

Referring to FIGURES 1, 8 and 9, the building structure in the position as illustrated in FIGURE 1 is rigidly secured to the carrier frame and the support frame by means of a plurality of clamping members 90. As best seen in FIGURES 8 and 9, each of the clamping members consists of a horizontal portion 91 adapted to engage the bottom surface of a support beam, a vertical flange portion 92 adapted to engage the inner surface of the support beam, and a vertical plate portion 93 adapted to engage the outside surface of the support beam. An upwardly extending arm member 94 is rigidly mounted on the vertical plate portion 93, having a bearing block 95 mounted thereon, which is adapted to engage a side of a floor joist 25. Also rigidly mounted on the vertical plate portion 93 is an upwardly extending arm member having a clamp screw 97 mounted in a suitable opening therein for movement toward the bearing block 95. The clamp screw is provided with an enlarged end portion 98, which is adapted to engage the floor joist on the opposite side from the bearing block to rigidly clamp the clamping member mounted on the support beam to the floor joist. It will be appreciated that the clamping members 90 are mounted on the support beams in the manner as shown in FIGURE 8 and clamped to the floor joist to provide an integral structure between the carrier frame and support frame and the building structure. Accordingly, by clamping the entire carrier frame and support frame along the entire length of the building structure, the weight of the building structure is distributed evenly along the entire length of the carrier and support frames.

In the use of the present invention for transporting a building structure as illustrated in FIGURES 1, 10 and 11, consisting of a one-half section of a home divided along a longitudinal centerline, the carrier frame, the support frame and the coupling member are assembled as illustrated in FIGURES 1 and 2, and the building structure is positioned on the frame members with the floor joist 25 extending transversely relative to the longitudinal axis of the trailer. The building structure is then rigidly secured to the frame members by means of a plurality of the clamping members 90 which are mounted on the under side of the support beams and clamped to the transverse floor joists. The trailer then is properly assembled with the building structure rigidly secured thereto for transporting the same over roadways to the particular job site. By rigidly securing the building structure along the entire length of the carrier and support frames, the weight of the building structure is distributed along the length of the trailer so as to avoid any stress concentrations which would normally develop at some intermediate point on the support frame. Depending upon the width of the building structure, the outriggers 65 are adjusted to properly support the lateral extremities of the building structure. During the transportation of the home from the prefabrication site to a selected location adjacent the foundation site, whenever the trailer encounters any difficult grades in the road or the rear end of the trailer encounters any soft ground which would cause it to sink and thereby become obstructed, it would be possible to selectively operate any of the fluid actuated devices seated on the brackets 50 secured to the frame 27 of the wheeled unit from the control station of the prime mover means to vertically displace the building structure clamped to the carrier frame and support frame relative to the wheeled unit. This would enable the operator of the prime mover means to relieve any bending stresses which perhaps would develop in the building structure when negotiating difficult grades, and to facilitate removing the trailer from the obstruction caused by sinking in soft ground.

To transfer the building structure from the trailer onto a selected foundation site, the trailer is positioned at a location adjacent the foundation site, as illustrated in

FIGURE 10, so that the axis of the trailer is substantially perpendicular to the contemplated line of travel of the building structure along which the building structure will travel onto the foundation site. As soon as the building structure is properly positioned, as illustrated in FIGURE 10, the clamping members 90 are removed from the trailer so that the building structure is detached from the trailer. The building structure then is jacked up free of the trailer, by means of any suitable jacking units 99. The trailer is then disassembled by detaching the support beam members 68, 69, 70 and 71 from the carrier frame 21 and the coupling member 23, which are then positioned on suitable jacking units in parallel spaced relation along the contemplated line of travel for the building structure from its elevated position at the location adjacent the foundation site onto the foundation site, as illustrated in FIGURE 11. When the support beams are positioned along the contemplated line of travel, the upper surfaces of the support beams provide guide surfaces defining a track for a plurality of roller members 100, as best illustrated in FIGURES 12 and 13. Each of the roller members 100 comprises a horizontal plate member 101 having parallel spaced depending flanges 102 and 103. Disposed between the depending flanges 102 and 103 is a roller 104 freely mounted on an axle member 105, which is journaled in the depending flanges 102 and 103 and a roller 106 keyed to an axle 107 which also is journaled in the depending flanges 102 and 103. Mounted on the horizontal plate member 101 for rotation in a plane parallel thereto is a seating plate 108 on which a floor joist 25 is adapted to be seated. As illustrated in FIGURES 12 and 13, each of the roller members 100 is adapted to be mounted on the support beams assembled along the contemplated line of travel for transferring the building structure from the location adjacent the foundation site onto the foundation site. The roller members 100 initially are mounted on the assembled support beams defining the transfer track, and are positioned below selected floor joists of the elevated building structure when in the position as illustrated in FIGURE 10. The building structure is then lowered so that the floor joists come to rest on the seating plates 108 of the roller members. The building structure can then be rolled along the track provided by the support beam assemblies onto the foundation site.

The building structure can be moved by any suitable means, although it has been found that by extending the axle 107 on one of the roller members through a depending flange and providing a hexagonal head thereon, the roller members can be driven by means of a ratchet wrench 109, as illustrated in FIGURE 13. It will be appreciated that the movable seating plate 108 on each of the roller members 100 permits a limited amount of adjustment of the building structure in bringing it into proper alignment when moving it into position on the foundation site.

After the building structure has been transferred into position over the foundation site, the jacking units 99 are then utilized to lift the building structure vertically off of the transfer track. The transfer track and roller members are then removed from beneath the building structure and the structure is lowered into final position on the foundation site. The coupling member 23 is then attached to the carrier frame, as illustrated by broken lines in FIGURE 2, and the transfer track is further disassembled and all the components thereof placed on the abbreviated form of the trailer for the return trip back to the prefabrication site. The above mentioned procedure is substantially repeated to position the other half section of the building structure on the foundation site. The two sections are then secured together to complete the final building structure.

As previously indicated, any suitable jacking unit can be utilized for lifting and lowering the building structure when transferring the same from the trailer onto the found-

dation site. However, referring to FIGURES 14 through 16, there is shown a preferred embodiment of the jacking unit. Each of such units generally comprise a triangularly shaped base member 110 having a vertically disposed cylinder member 111 rigidly mounted thereon. The cylinder member 111 is supported in the vertical position by means of a plurality of support legs 112 secured to the upper end of the cylinder member and extending to the base member adjacent each of the apices thereof. Slidably mounted within the cylinder member 111 is a fluid cylinder 113 having a ram 114 slidably mounted therein. The lower end of the fluid cylinder 113 is provided with a rigidly mounted closure member 115 having a radially extending conduit 116 extending through an axially extending slot 117 in the outer cylinder 111. The conduit 116 is provided with a suitable connector 118 for connecting the fluid cylinder with a suitable fluid pressure source. Rigidly mounted on the upper end of the fluid cylinder 113 is a collar member 119 having an enlarged bore in the upper end thereof for receiving a packing ring 120 and a packing screw 121. As best illustrated in FIGURE 16, the fluid cylinder 113 can be moved upwardly to the position shown and supported on a diametrically disposed pin member 122 extending through aligned openings in the outer cylinder 111, and fluid under pressure can be applied to the fluid cylinder to axially move the ram 114 to engage and lift the building structure. It is contemplated that the same fluid pressure source for operating the fluid actuated devices 52 mounted on the wheeled unit of the trailer, may also be utilized as a fluid pressure source for each of the jacking units in lifting and lowering the building structure when transferring the same from the trailer onto the foundation site.

From the foregoing detailed description it will be evident that there are a number of changes, adaptations and modifications of the present invention which come within the province of those skilled in the art. However, it is intended that all such variations not departing from the spirit of the invention be considered as within the scope thereof as limited solely by the appended claims.

What I claim is:

1. A trailer comprising a wheeled unit, a carrier frame mounted on said wheeled unit, an elongated support frame detachably secured to said carrier frame, said carrier and support frames defining a bed for supporting a structure thereon when said support frame is attached to said carrier frame, removable clamping means for rigidly securing said structure to said support frame to provide an integral structure between said support frame and said building structure when said support frame is secured to said carrier frame, said support frame having guide surfaces defining a track for supporting said building structure for travel thereon when said support frame is detached from said carrier frame and positioned along a selected line of travel and coupling means detachably secured to said support frame for coupling said trailer to a prime mover means.

2. A trailer comprising a wheeled unit, a carrier frame mounted on said wheeled unit, an elongated support frame detachably secured at its rearward end to said carrier frame, said carrier and support frames defining a bed for supporting a structure thereon when said support frame is attached to said carrier frame, removable clamping means for rigidly securing said structure to said support frame to provide an integral structure between said support frame and said structure when said support frame is secured to said carrier frame, fluid actuated means mounted on said wheeled unit for selectively vertically displacing said carrier frame relative to said wheeled unit, said support frame having guide surfaces defining a track for supporting said structure for travel thereon when said support frame is detached from said carrier frame and positioned along a selected line of travel intersecting the longitudinal axis of the trailer and coupling means detachably secured to the

forward end of said support frame for coupling said trailer to a prime mover means.

3. A trailer comprising a wheeled unit, a carrier frame mounted on said wheeled unit, an elongated support frame detachably secured at its rearward end to said carrier frame, said carrier and support frames defining a bed for supporting a structure thereon when said support frame is attached to said carrier frame, removable clamping means for rigidly securing said structure to said support frame to provide an integral structure between said support frame and said structure when said support frame is secured to said carrier frame, fluid actuated means mounted on said wheeled unit for selectively vertically displacing said carrier frame relative to said wheeled unit, said support frame having guide surfaces defining a track for supporting said building structure for travel thereon when said support frame is detached from said carrier frame and positioned along a selected line of travel intersecting the longitudinal axis of the trailer and coupling means detachably secured to the forward end of said support frame for coupling said trailer to a prime mover means.

4. A trailer comprising a wheeled unit, a carrier frame mounted on said wheeled unit, an elongated support frame detachably secured at its rearward end to said carrier frame, said carrier and support frames defining a bed for supporting a structure thereon when said support frame is attached to said carrier frame, removable clamping means for rigidly securing said structure to said support frame to provide an integral structure between said support frame and said structure when said support frame is secured to said carrier frame, fluid actuated means mounted on said wheeled unit for selectively vertically displacing said carrier frame relative to said wheeled unit, said support frame having guide surfaces defining a track for supporting said structure for travel thereon when said support frame is detached from said carrier frame and positioned along a selected line of travel and coupling means selectively detachably secured to said support frame and said carrier frame for coupling said carrier to a prime mover means.

5. A trailer comprising a wheeled unit, a carrier frame mounted on said wheeled unit, a pair of spaced, longitudinally extending support beams detachably secured at the rearward ends thereof to said carrier frame, removable clamping means for rigidly securing said structure to said support beams to provide an integral structure between said support beams and said structure when said support beams are secured to said carrier frame, a plurality of transversely extending cross beams detachably secured to said support beams, coupling means detachably secured to the forward ends of said support beams for coupling said trailer to a prime mover means, said carrier frame and support beams defining a bed for supporting a structure thereon when said support beams are attached to said carrier frame, fluid actuated means mounted on said selected unit for selectively displacing said carrier frame relative to said wheeled unit, and said support beams having guide surfaces defining a track for supporting said structure thereon when said support beams are detached from said carrier frame and said coupling means and positioned in spaced parallel relation along a selected line of travel intersecting the longitudinal axis of the trailer.

6. A system for transferring building structure from a selected location adjacent a foundation site onto the foundation site comprising a trailer including a wheeled unit, a carrier frame mounted on said wheeled unit, a pair of spaced, longitudinally extending support beam assemblies detachably secured at the rearward ends thereof to said carrier frame, said support beam assemblies each consisting of at least two beams bolted together in longitudinal alignment, a plurality of transversely extending cross beams detachably secured to said support beam assemblies, a coupling member selectively detachably secured to said carrier frame at the forward ends of said support beam assemblies for coupling said trailer

to a prime mover means, said carrier frame and support beam assemblies defining a bed for supporting said building structure thereon when said support beam assemblies are attached to said carrier frame, said support beam assemblies having guide surfaces defining a track for supporting said building structure for travel along a line of travel from said selected location onto said foundation site when said support beam assemblies are detached from said carrier frame and said coupling member and positioned in spaced relation along said line of travel and a plurality of jacking units for vertically moving said building structure at said selected location and said foundation site.

7. A system for transferring a building structure from a selected location adjacent a foundation site onto the foundation site comprising a trailer including a wheeled unit, a carrier frame mounted on said wheeled unit, a pair of spaced, longitudinally extending support beams detachably secured at the rearward ends thereof to said carrier frame, a plurality of transversely extending cross beams detachably secured to said support beams, coupling means detachably secured to the forward ends of said support beams for coupling said trailer to a prime mover means, said carrier frame and support beams defining a bed for supporting said building structure thereon when said support beams are attached to said carrier frame, removable clamping means mountable on said support beams for rigidly securing said building structure to said support beams to provide an integral structure between said support beams and said building structure when said support beams are secured to said carrier frame, said support beams having guide surfaces defining a track for supporting said building structure for travel along a line of travel from said selected location to said foundation site when said support beams are detached from said carrier frame and said coupling means and positioned in spaced parallel relation along said line of travel.

8. A trailer for a structure comprising a wheeled unit, carrier means having the rearward end thereof mounted on said wheeled unit for supporting said structure on the axis of said trailer including support means extending forwardly from said wheeled unit detachably secured thereto for supporting said structure for travel along a selected line of travel intersecting the axis of said trailer, fluid actuated means mounted on said wheeled unit for selectively displacing said carrier means relative to said wheeled unit, removable clamping means for rigidly securing said structure to said support means to provide an integral structure between said carrier means and said structure when said support means is attached to said car-

rier means, rolling means mountable on said support means when detached from said carrier means and disposed along said selected line of travel for supporting said structure for travel on said support means and means for coupling the forward end of said carrier means to a prime mover means.

9. A trailer for a structure comprising a wheeled unit, a carrier frame mounted on said wheeled unit, an elongated support frame detachably secured at its rearward end to said carrier frame, said carrier and support frames defining a bed for supporting said structure thereon when said support frame is attached to said carrier frame, removable clamping means mountable on said support frame for rigidly securing said structure to said support frame to provide an integral structure between said support frame and said structure when said support frame is secured to said carrier frame, fluid actuated means mounted on said wheeled unit for selectively vertically displacing said carrier member relative to said wheeled unit, said support frame having guide surfaces defining a track for supporting said structure for travel intersecting the longitudinal axis of said trailer along a line of travel from a selected location to an adjacent foundation site when said support frame is detached from said carrier frame and positioned along said line of travel, rolling means mountable on said guide surfaces when said support means are disposed along said line of travel for supporting said structure for travel on said support frame and coupling means selectively detachably secured to said support frame and said carrier frame for coupling said carrier to a prime mover means.

References Cited by the Examiner

UNITED STATES PATENTS

1,541,457	6/1925	Winn	214—38.10
2,102,844	12/1937	Hester	214—38.40
2,512,798	6/1950	Hodges	214—38.40
2,631,885	3/1953	Ault	214—515 X
2,834,599	5/1958	Sarchet	214—515 X
2,926,797	3/1960	Decker	214—38.40
2,944,492	7/1960	Clejan	296—35.1 X

FOREIGN PATENTS

495,648	9/1950	Belgium.
606,618	3/1926	France.
417,366	10/1934	Great Britain.

GERALD M. FORLENZA, *Primary Examiner*.

A. J. MAKAY, *Assistant Examiner*.