

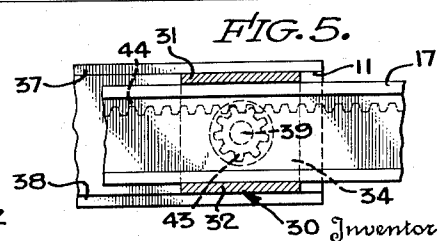
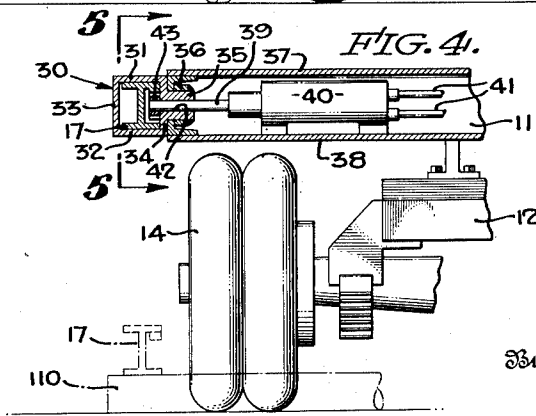
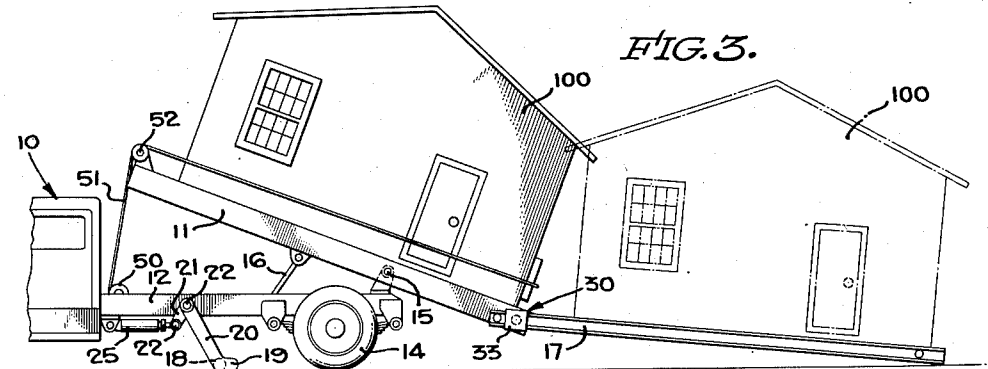
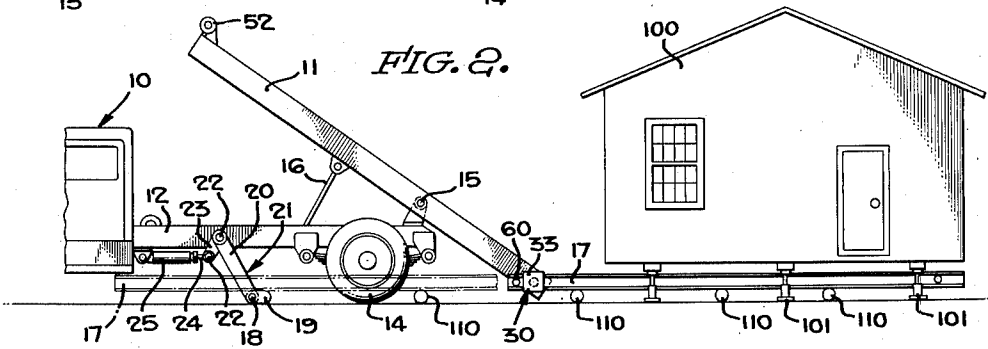
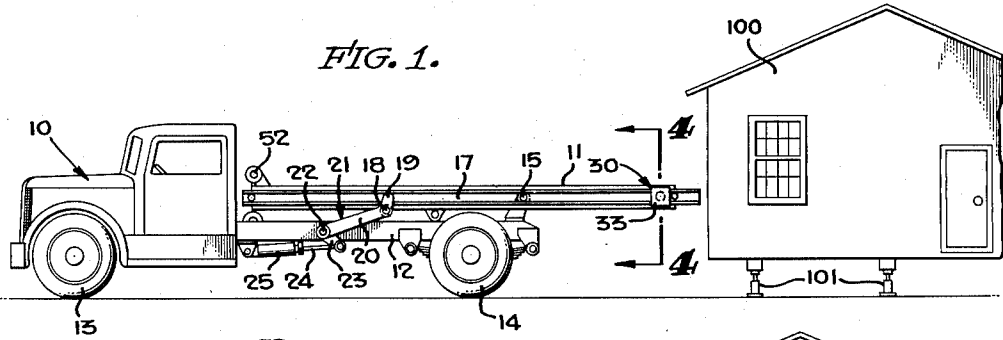
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APPARATUS FOR MOVING SMALL HOUSES AND THE LIKE

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APPARATUS FOR MOVING SMALL HOUSES AND THE LIKE

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4 Claims. (Cl. 214-85)

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This invention relates to an apparatus for moving small houses and the like, more particularly such an apparatus employing a truck having associated therewith suitable apparatus adapted to project under the house to be moved and support the house while the same is propelled onto the bed of the truck for moving.

It is a particular feature of this invention that the moving of houses and other like objects is greatly facilitated, in that after the house has been broken free from its foundation, it is unnecessary to jack the house to a height at which point trucks and dollies can be placed under the house, it being sufficient that the house is supported high enough so that the projecting rails of the invention can be placed underneath.

It is accordingly one object of this invention to provide a method and apparatus for moving houses and the like which greatly facilitates such operations, and reduces their cost.

These and further objects, features and advantages of the invention will be apparent from the annexed specification, in which:

Figure 1 is a side elevation of apparatus built in accordance with this invention;

Figure 2 is a fragmentary elevation similar to Figure 1 showing the apparatus in a further stage of carrying out the method of this invention;

Figure 3 is a view similar to Figure 2 showing a still further stage of the method;

Figure 4 is an enlarged section taken on the line 4-4 of Figure 1; and

Figure 5 is an enlarged section taken on the line 5-5 of Figure 4.

Referring now more particularly to the drawings, there is shown apparatus for carrying out the method of this invention, which apparatus is depicted by way of illustration only, the method of this invention not being confined to the details of apparatus involved. As shown in the drawing, 10 illustrates a truck having a bed 11, a frame 12, front wheels 13 and rear wheels 14. The bed 11 is adapted to be tilted about a pivot 15 by means of a hoist 16 in a conventional manner. On either side of the bed 11 is provided a rail 17, shown here in the form of an I-beam. Rail 17 is supported upon a rest 18 adjacent its forward end. The rest 18 has a flange 19 which acts as a keeper to prevent the rail from falling off the rest, and the rest is formed upon one end of an arm 20, which arm 20 forms one element of a crank 21, which crank 21 is pivoted as at 22 to the frame 12. The other arm 23 of the crank 21 is pivotally connected to a shaft 24 operatively

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connected to a piston (not shown) of a hydraulic cylinder 25.

The other end of the rail 17 is supported in a box 30. The box 30 is most clearly shown in Figures 4 and 5, and consists of an upper horizontal member 31, lower horizontal member 32, an outer vertical member 33, an inner vertical member 34, the ends of the box thus formed being left open for the passage of the rails 17. The inner vertical member 34 has formed integrally therewith a boss 35 in the form of a shaft journaled in a bearing 36. Bearing 36 is suitably supported, as indicated, in the bed 11 of the truck, which is shown herein as comprising an upper horizontal member 37 and a lower horizontal member 38 between which is mounted means for driving a shaft 39.

The means for driving the shaft 39 may be an air or electro-motor 40 suitably actuated as by conduits or hoses 41. The shaft 39 passes through an aperture 42 in the boss 35 and has a gear 43 keyed to its outer end. The gear 43 forms one member of a rack and pinion, the other member of which is a rack 44 formed on the lower side of the inner flange of the I-beam comprising the rail 17, as indicated in Figure 5. A winch 50 is provided upon the frame of the truck, and a cable 51 is reeved over a pulley 52 mounted adjacent the forward edge of the bed 11.

In carrying out the method of this invention with the above described apparatus, the truck 10 is driven adjacent the object to be moved, such as a house 100, which house 100 has previously been cleared of its foundation and rests upon jacks 101, with open space appearing between the house and the ground. With the truck thus adjacent the house to be moved the hoist 16 is actuated, tilting the bed 11 as indicated in Figure 2 and placing the box 30 in a position adjacent the ground. At the same time, the hydraulic cylinder 25 is actuated, causing the crank 21 to be pivoted about pivot 22, thus placing the rest 18 similarly adjacent the ground. As will be appreciated, this positioning of the rest 18 and the box 30 adjacent the ground carries the beams or rails 17 adjacent the ground. At this time, a series of rollers 110 is placed in the path of the beam 17 and the air or electro-motor 40 is actuated to cause the pinion 43 to drive the rack 44 and force the rails 17 out over the rollers 110. A stop 60 is provided on the forward end of the rails 17 to prevent the rails from being driven completely out of the boxes 30. With the rails driven to their extended position as shown

In Figure 2, the cable 51 is wrapped about the house to be moved, as shown in Figure 3, and the winch actuated to draw the house on to the rails 17. In the course of this movement, the bed 11 may be tilted as shown in Figure 3 to facilitate winching the house on to the rails and from the rails on to the bed of the truck. It will be appreciated that with the house fully drawn on to the bed of the truck, the air or electro-motor will be actuated in the reverse direction to drive the rails 17 back into position to engage on the rest 18, after which the bed of the truck will be moved by the hoist 16 into horizontal position, and the crank 21 actuated by the hydraulic cylinder 25 to raise the rest 18 to its original position, and the truck will be fully loaded with the house and may proceed to its destination.

While there has been described in detail apparatus by means of which the rails 17 may be carried by the truck and projected beneath the house to receive the same and support it while it is being drawn by the winch on to the bed of the truck, it will be appreciated that any means whereby the rails may be carried to and from their destination by the truck and projected beneath the house so as to support the same during this operation can equally be used within the purview of this invention; and while there has been described what is at present considered a preferred embodiment of the invention, it will be appreciated by those skilled in the art that various changes and modifications can be made therein without departing from the true spirit of the invention, and it is intended to cover all such changes and modifications as come within the true spirit and scope of the appended claims.

What is claimed is:

1. House moving apparatus comprising a motor truck, a tiltable bed on said truck, a pair of rails one on either side of said truck, pivoted brackets adjacent the rear of said bed and engaging said rails, means adjacent the front of said bed adapted to support the front of said rails and to move the front of said rails to or away from the ground, means carried by said bed and engaging said rails for projecting said rails through said brackets adjacent the ground to form an inclined plane leading to said truck bed when said bed is tilted in intermediate position.

2. House moving apparatus comprising a motor truck, a tiltable bed on said truck, a pair of rails one on either side of said truck, pivoted brackets adjacent the rear of said bed and engaging said rails, means adjacent the front of said bed adapted to support the front of said rails and to move the front of said rails to or away from

the ground, means carried by said bed and engaging said rails for projecting said rails through said brackets adjacent the ground to form an inclined plane leading to said truck bed when said bed is tilted in intermediate position, a winch on said truck, and a cable operable by said winch to draw a house to be moved up said inclined plane.

3. House moving apparatus comprising a motor truck, a tiltable bed on said truck, a pair of rails one on either side of said truck, pivoted brackets adjacent the rear of said bed and engaging said rails, means adjacent the front of said bed adapted to support the front of said rails and to move the front of said rails to or away from the ground, means comprising pinions in said brackets and racks on said rails for projecting said rails through said brackets adjacent the ground to form an inclined plane leading to said truck bed when said bed is tilted in intermediate position.

4. House moving apparatus comprising a motor truck, a tiltable bed on said truck, a pair of rails one on either side of said truck, pivoted brackets adjacent the rear of said bed and engaging said rails, means adjacent the front of said bed adapted to support the front of said rails and to move the front of said rails to or away from the ground, means comprising pinions in said brackets and racks on said rails for projecting said rails through said brackets adjacent the ground to form an inclined plane leading to said truck bed when said bed is tilted in intermediate position, a winch on said truck, and a cable operable by said winch to draw a house to be moved up said inclined plane.

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