April 30, 1935. J. H. DE BOER 1,999,172

UTILITY TRUCK DOLLY

Filed April 18, 1933

Fig. 1

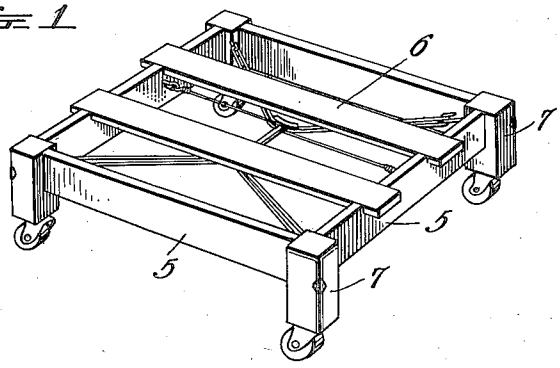


Fig. 2

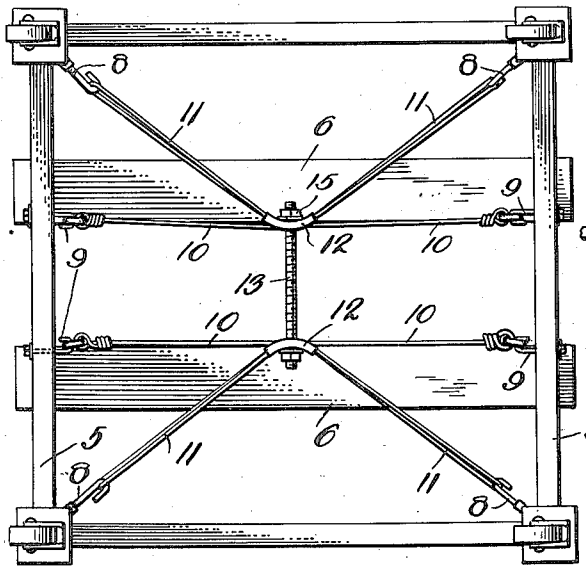


Fig. 3

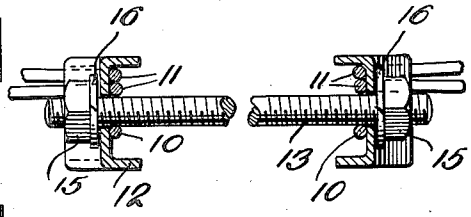
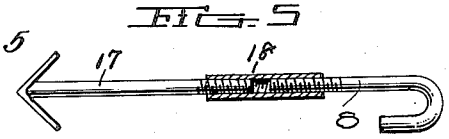


Fig. 5



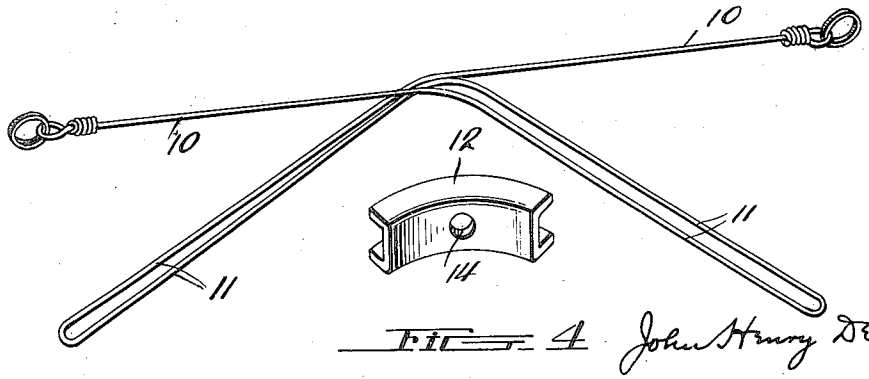


Fig. 4

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UTILITY TRUCK DOLLY

John Henry De Boer, Syracuse, N. Y.

Application April 18, 1933, Serial No. 666,750

1 Claim. (Cl. 248—41)

This invention relates to that type of truck or dolly, for conveniently supporting a piece of heavy furniture, electric refrigerators, or any kind of commodity, in such manner that it may be readily shoved about manually upon the show-room floor, or elsewhere. Heretofore these trucks have been made of metal or wood. The metal trucks are heavy and expensive, and the wood trucks are either too heavy or, when made light enough for convenience in moving them about, are too frail for long usage. It is the object of my invention to so construct this truck or dolly that it will not only be inexpensive in construction but will be light in weight and be especially durable in that it will not wrack or loosen in the joints with extensive use and therefore become useless, as more fully hereinafter set forth.

In the drawing annexed, Fig. 1 is a perspective view of my improved truck;

Fig. 2 is a bottom view thereof;

Fig. 3 is a sectional view taken through the central tightening device;

Fig. 4 is a detail perspective view of one of the stretched wire braces; and

Fig. 5 is a detail view of one of the hook bolts.

Referring to the drawing by reference characters, 5 designates the usual side bars of the truck connected together by the usual top bars 6 and at their corners by the usual short posts 7, these latter being provided with the usual casters.

In the inner corner of each of the posts 7 is fastened a hook-bolt 8 which projects inwardly, and in two of the side bars or rails 5 is anchored a pair of similar hooks 9. Stretched between the aforesaid hooks is a flexible wire structure arranged as follows: To each pair of opposite hooks 9 is attached the extremities of a wire which forms two transverse legs 10 and two diagonal legs 11, making in all four diagonal legs 11 and four transverse legs 10, the latter being arranged parallel to each other at opposite sides of a center line drawn through the truck frame.

From each hook 9 the wire extends inwardly, around an arcuate metal channel 12, thence diagonally to the opposite hook 8, around which it is looped, thence back to the channel-iron 12, thence to the companion corner hook 8, around which it is also looped, thence back and around the channel-iron, and thence to the opposite hook 9, to which it is anchored by a loop or ring. At the point where the wires contact with the channel-iron 12 they lie in the channel thereof. The two channel-irons 12 are connected by a central, threaded rod 13 which lies at right angles to the legs 10 of the bracing wires and whose ends extend through holes 14 in the channel-iron. On the ends of the rod 13 are threaded nuts 15 which when screwed up on the bolt abut against the concave sides of the channel-irons and draw the channel-irons toward the center of the truck i. e., toward each other. Suitable split spring washers 16 are desirably employed between the nuts and the concave sides of the channel-irons to thereby tend to lock the nuts in their tightened positions.

It will be observed from this wire structure that the tightening of the nuts draws all the legs 10 and 11 taut, thereby bracing the structure in all directions and rendering the usual heavy braces unnecessary. Should the members of the truck frame loosen up from use they may be readily tightened up again by means of the nuts 15. It will be understood, of course, that during the tightening operation the wires are free to slide in the arcuate channel-irons, so that all parts of the wire bracing structure will be under the same tension. The object of channeling the wires 12 is to prevent the wire slipping off the side edges thereof. It is obvious that other forms of screw-threaded tightening devices may be employed without departing from my invention.

It is desirable that the hook-bolt 8 shall be anchored in the corner post in a substantial manner. One good way of doing this is to employ a threaded sleeve 18 which is housed in a hole in the post and couples the inner end of hook-bolt 8 to an extension bolt 17 which extends diagonally through the post to the exterior corner thereof, where it is provided with an angular head adapted to fit around and embrace the corner of the post. In this way the bolt will be substantially anchored in the post and the pull on the inner hooked end of the bolt will draw the post inwardly and thus contribute very materially to the rigidity of the frame, which rigidity is effective in preventing the casters tearing out or loosening from the posts.

I claim:

In a truck of the class described, a frame and a bracing means for said frame embodying two wire lengths, one arranged at each side of the center of said frame and each extending from one side wall to the center of the frame, thence to an opposite corner of the frame, thence by a loop back to the center of the frame, thence by a loop to an opposite corner of the frame and thence back to the center of the frame and thence to the opposite side wall of the frame, and central means connecting the two wire structures thus formed, this connecting means embodying devices for tightening said wires simultaneously and uniformly.

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