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HAND TRUCK FOR COVERED REFUSE CANS

Filed May 5, 1958

FIG. 1.

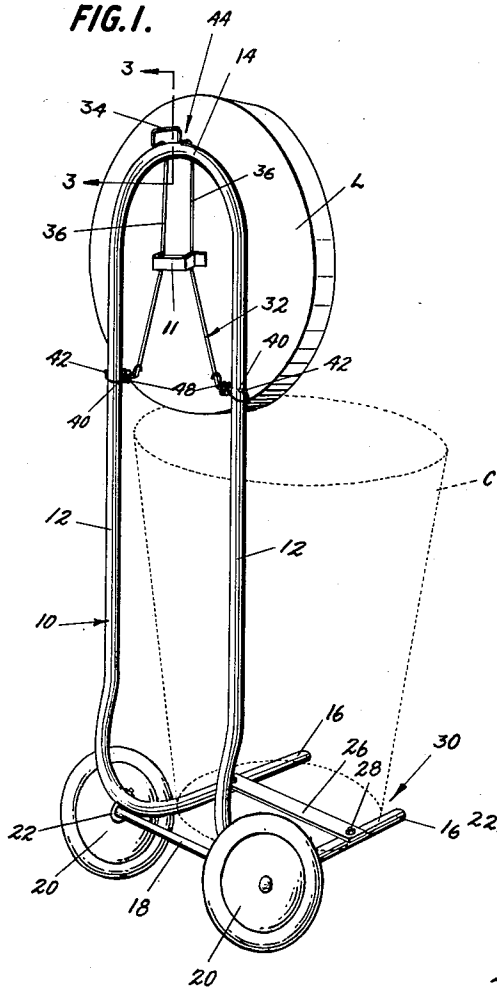
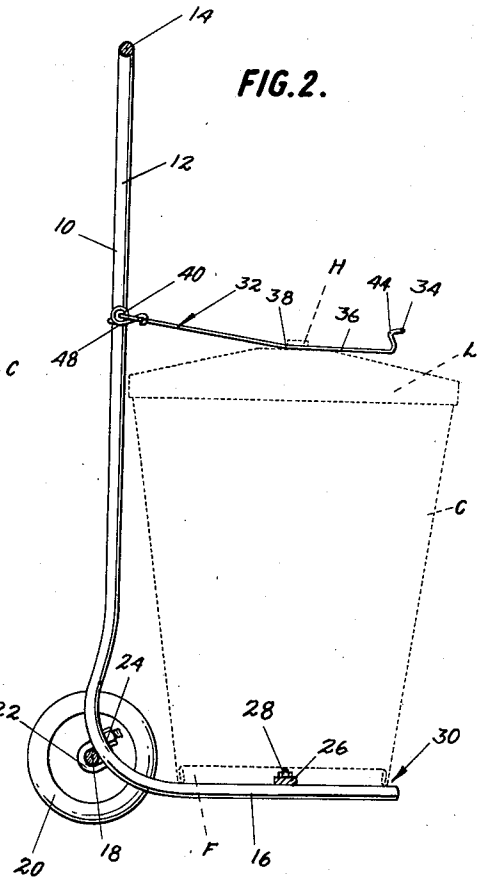


FIG. 2.



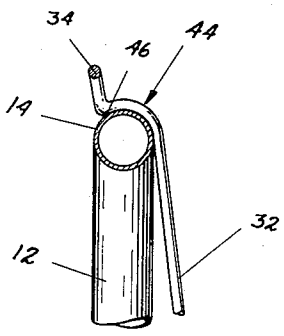


FIG. 3.

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HAND TRUCK FOR COVERED REFUSE CANS

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3 Claims. (Cl. 248—129)

Our present invention relates to hand trucks which are particularly adapted to support and convey a refuse can having a removable cover.

It is an object of the present invention to provide a wheeled hand truck having a can support base with substantially perpendicular standards constituting handles which truck provides means for conveniently transporting a refuse can from one location to another and has a spring biased arm adapted to be associated with the cover of a refuse can supported on said base to prevent accidental displacement of said cover and yet provide means for conveniently opening said can by lifting and temporarily securing said cover to said truck in a removed position.

In the accompanying drawings we have disclosed one preferred physical embodiment of our present invention, but it is to be understood that we do not desire to be unnecessarily limited to the actual physical structure shown, but desire to claim the invention broadly, limited only by the prior art as reflected in the appended claims.

In the accompanying drawings which form a component part of this specification and in which like numerals are employed to designate like parts:

Figure 1 is a perspective view of our improved hand truck for a covered refuse can, showing a refuse can in broken lines with its cover in full lines, disposed in the open position;

Figure 2 is a vertical cross section taken through the truck constituting the subject matter of the present invention and showing by broken lines the can with its cover in the closed position; and

Figure 3 is an enlarged fragmentary vertical cross section taken through the free end of the arm and the interconnecting bar of the standards as at line 3—3 of Figure 1.

Referring now in greater detail to the drawings, we have disclosed our hand truck for covered refuse cans as having a frame **10** which includes a pair of laterally spaced upright standards **12—12** interconnected at their upper ends by means of a bar **14** and terminate at their lower ends in perpendicular laterally spaced parallel base members **16**. It will be noted that the interconnecting bar at the upper ends of the standards is in reality an arcuate continuation of the standards which preferably but not necessarily are formed from a single length of tubing bent midway its length to form parallel standard members **12** extending from the interconnecting bar **14**, and thence bent in planes each common to its particular standard **12** and 90° from the bend forming the crossbar **14** to form base members **16**. Substantially at the arcuate juncture of the base members **16** and the standards **12**, we provide a laterally disposed axle **18** upon the ends of which are journaled wheels **20** for mobilizing the refuse can frame.

It will be noted that J-bolts **22** extend through apertures formed in the frame **10** and nuts **24** tighten said

J-bolts to clamp the axle **18** to the frame as clearly shown in Figures 1 and 2 of the drawing.

The base members **16** are interconnected by means of a tie bar **26** which is bolted or otherwise secured at **28** to each of the base members **16**, thus forming a unitary base **30** adapted to receive and support a refuse can as C thereon.

In addition to tying the base members **16** together to form a unitary base **30**, the bar **26** provides means for positioning the can C on the base to prevent its slippage or accidental removal therefrom. It will be noted that the bar **26** and its fastening means **28** extend upwardly within the downwardly presented peripheral flange F of the refuse can C as clearly seen in Figure 2.

At substantially the height of the refuse can C where its cover L is disposed, the refuse can truck is provided with a vertically tiltable arm **32** which is formed from a length of wire by bending it midway its length to provide a laterally disposed hand grip portion **34** terminating at each end in parallel members **36** which, substantially midway their length at **38**, are bent into divergence with respect to each other so that the ends opposed to the hand grip **34** are disposed at substantially the inner faces of the standards **12**. At these ends the handle **32** has outwardly bent axially aligned ears **40** which constitute pivot pins for the handle **32**. These pins extend through apertures **42** formed in the standards **12** and are held therein. It will thus be seen that the arm **32** is supported for vertical tilting movement of its outer end about the axes of ears **40** alternately to and between the full line positions of Figures 1 and 2.

At its outer end the arm **32** is provided with latch means **44** which is adapted to cooperate with the interconnecting bar **14** for the standards **12** to releasably secure the arm in the vertical position shown in Figure 1 and yet permit its movement to the lowered position shown in Figure 2 with the resultant respective positioning of the cover L in its open position and its closed position. The latch means comprises the parallel members **36** being bent into coincident hooks **46** so that they hook over the bar **14** as shown and are retained by the inherent resiliency of the material of arm **32**.

To assist in maintaining the cover L in its closed position, we provide torsion springs **48** at the pivotal interconnection of the arm **32** and the standards **12**. Obviously any resilient means for urging the arm **32** to the lowered position as seen in Figure 2 will suffice for maintaining the cover L in its closed position.

Having thus described our invention, we desire to secure by Letters Patent of the United States the following:

1. A hand truck for a covered refuse can and the like, comprising a wheeled frame including vertical standards integrally united at their upper ends and terminating at their lower ends in spaced substantially perpendicular can support base members extending forwardly from the wheels; a spring wire arm having axially aligned spaced pivot pins at its inner end journaled one on each standard for vertical tilting movement of the free end of said arm; latch means on the free end of said arm; said latch being adapted to releasably interlock with the interconnected upper ends of said standards for releasably securing said arm in a vertical position; resilient means urging said arm toward a lowered position; and means for interconnecting said arm to the cover of a can supported on said base members for yieldingly holding said cover in covering relation to said can and adapted to remove said cover when moved to the said vertical position.

2. The invention as defined in claim 1 wherein said arm comprises a length of wire folded midway its length

to provide spaced parallel branches for a portion of the length of said arm, and said branches being bent to form coincident resilient hooks at its outer end and constituting said latch means.

3. A hand truck for a covered refuse can and the like comprising an endless tubular frame member formed to provide a pair of vertical standards united at their upper ends by a central portion of said frame member constituting a crossbar and terminating at their lower ends in coextensive parallel substantially perpendicular base members; a tie bar extending laterally of said frame and having its ends rigidly fixed to said base members intermediate their lengths; an axle parallel to said tie bar and rigidly secured to said frame member at the junctures of said base members and said standards; wheels journaled on the ends of said axle; said standards having a pair of axially aligned apertures therein intermediate their vertical lengths; a spring wire arm formed from a length of wire folded midway its length to provide spaced parallel branches for a portion of the length of said arm, said branches being bent to form coincident resilient hooks at the outer end of said arm which constitute latch means, said branches diverging from said outer end to their inner ends and terminating in oppositely extending journal pins, one disposed in each said aperture and secured for vertical tilting movement of said arm; said latch being disposed to hook over the said cross bar to releasably secure the arm in a vertical position; resilient means urging said arm toward a lowered position; and said arm adapted to pass through the handle of a can cover for interconnecting said arm to the cover of a can supported on said base members and alternately holding said cover out of covering relation to said can when the arm is disposed in the vertical position and by means of said resilient means yieldingly holding said cover in covering relation to said can.

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