March 30, 1954 W. E. WILLIAMS 2,673,671

RESTAURANT BUS CART

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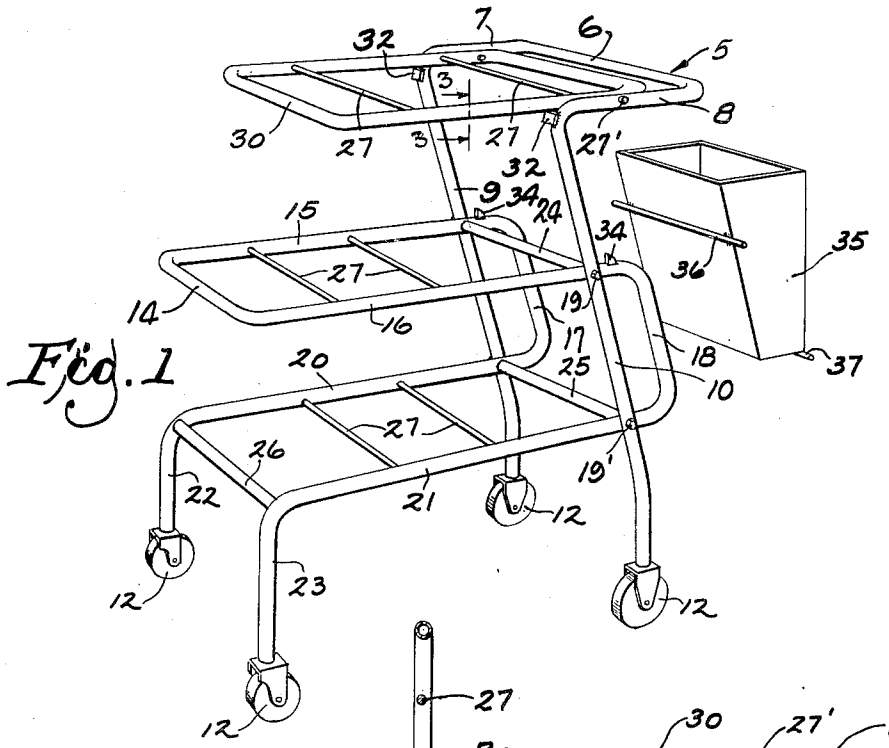


Fig. 1

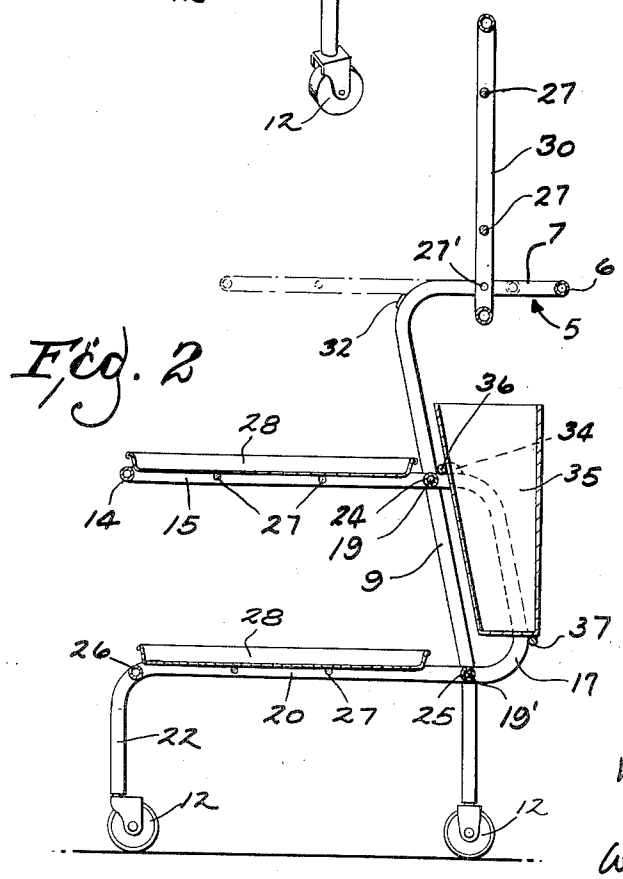


Fig. 2

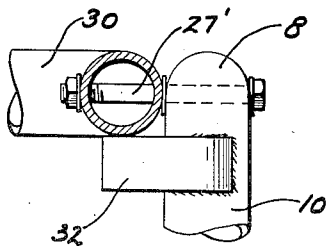


Fig. 3

INVENTOR.
WILLIAM E. WILLIAMS
BY
Wheeler, Wheeler & Wheeler
ATTORNEYS

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RESTAURANT BUS CART

William E. Williams, Milwaukee, Wis.

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2 Claims. (Cl. 224—42.46)

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This invention relates to a restaurant bus cart.

It is a primary object of the invention to provide a novel and simple bus cart of which the frame comprises two units, such units together affording all four of the legs and two of the three shelves and also the handle by which the bus cart is propelled.

It is a further object of the invention to provide a bus cart in which the top shelf is pivoted and provided with a simple means for normally supporting it in a horizontal position from which it may readily be tilted to a vertical position.

It is a further object of the invention to provide a novel bus cart in which the several shelf frames are of greater diameter than the intermediate supports which span such frames, the difference in diameter being adapted to receive and position standard restaurant trays, which are thereby fixed on the respective shelves securely but without impeding ready removal.

Other objects of the invention will appear in more detail from the following disclosure:

Fig. 1 is a view in perspective showing a bus cart embodying my invention.

Fig. 2 is a view in longitudinal section through the device of Fig. 1.

Fig. 3 is a fragmentary detail view taken in section on the line 3—3 of Fig. 1.

The handle and rear leg unit 5 comprises a single piece of tubing. The handle is made from an intermediate portion 6 and two forwardly extending portions 7, 8, thereof. From the forwardly extending portions 7, 8, the two extremities of the tube are carried downwardly at 9 and 10 to constitute the rear legs of the frame. They are preferably rearwardly inclined until reaching the level of the lower shelf hereinafter to be described, and ultimately they extend vertically to the casters 12.

Another unit comprising a single piece of tubing provides the intermediate and lower shelves and the forward legs. A transverse portion intermediate the ends of the tubing constituting the forward unit serves as the front of the intermediate shelf 14. Thence portions 15, 16, of the tubing extend rearwardly along the sides of the shelf and past the legs 9 and 10, to which they are connected by bolts or otherwise. At the rear of the horizontal portions, the tube is bent to provide portions 17, 18, which extend downwardly in spaced relation to the legs 9, 10. At the level of the lower shelf, the tubular portions 20, 21, extend forwardly between legs 9 and 10 and are bolted or otherwise secured to the legs. These portions 20, 21, comprise the sides of the lower

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shelf. At the forward end of the lower shelf the extremities of the tubing are turned downwardly at 22, 23, to provide the front legs. These are preferably provided with casters 12 like those provided for the rear legs.

Spanning the space between the sides 15 and 16 of the intermediate shelf at the rear thereof is a frame member 24 which preferably corresponds substantially in diameter with that used to make the frame units above described. The bolt 19 may pass through the tubular member 24. Similar frame members 25 and 26 span the space between the side portions 20, 21 of the lower shelf at the front and rear thereof, the frame tube 25 preferably receiving bolt 19'.

Intermediate the ends of the respective shelves, the space between frame members at the sides thereof is spanned by the cross bars 27 which have their top surfaces at a slightly lower level. This is most easily accomplished by making the tubes or bars 27 of less thickness than the tubing making up the frame units so that a conventional restaurant tray such as that indicated at 28 will be supported on the crossbars 27 and will fit within the frame members which outline the respective shelf. This is best illustrated in Fig. 2.

The top shelf comprises a pivoted subframe 30 of rectangular outline with rounded corners, the tubing or rod used in making it being preferably of substantially the same diameter as that used in making the main frames as above described. The subframe is spanned by one or more bars 27 and pivoted on the pintle bolts 27' of the handle members 7, 8 for movement between the dotted and the full line positions shown in Fig. 2.

In order to define these positions, suitable stop detents are provided at 32, each of these comprising a short arm welded to the legs 9, 10 and extending inwardly therefrom. The weight of the subframe and any tray mounted thereon will tend to hold the subframe in the positions shown in Fig. 1 and also shown in dotted lines in Fig. 2. However, in order to give ready access to the intermediate shelf, the operator may swing the empty subframe upwardly to the full line position shown in Fig. 2, thereby completely exposing the tray 28 on the intermediate shelf.

The fact that the legs of the rear frame unit are spaced sufficiently far apart to receive the portions 17, 18 of the forward frame unit between them also enables the rear frame unit to receive within the portions 7, 8 of the handle the swinging subframe 30 which is of the same di-

mensions as the intermediate and lower shelves as above described and is also adapted to receive and securely hold a tray loaded with dishes.

While the two frame units and the subframe are desirably made of tubing or piping as above described, they may also be made of solid bar stock. The tubing is preferred because of its lightness. The completed cart is extremely light and easy to handle, both in propelling it and in loading and removing dishes therefrom.

I have found it convenient to add a box for silverware or napkins or both. The portions **15**, **16**, of the forward frame unit are provided, just behind legs **9** and **10**, with lugs **34**. The utility box **35** fits between the sides of this frame unit, which constitutes a saddle, and carries lateral arms in the form of a rod **36** to engage frame portions **15**, **16**, between the lugs **34** and the rear legs **9** and **10**. This provides all necessary support, but to hold the box upright it is provided with other arms, conveniently comprising the ends of rod **37**, for engaging the rear uprights **17**, **18** as shown in Fig. 2. The box is readily positioned and removed and is out of the way when in use.

I claim:

1. A bus cart comprising the combination with a rear leg unit and a forward leg unit, said forward unit comprising loops respectively projecting beyond the rear leg unit and connected thereto to constitute said loops a saddle open at its rear, of a receptacle detachably positioned between said loops and provided with projecting arms adapted for engagement with said loops for the support and positioning of the receptacle, said loops each being provided with lugs with which said arms are engageable to mount said receptacle within said saddle.

2. The device of claim 1 in which said receptacle is further provided with stabilizing arms adapted for engagement with the cart and which cooperate with said support arms to define the mounted position of the receptacle.

WILLIAM E. WILLIAMS.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
D. 152,666	Williams	Feb. 8, 1949
1,015,182	Herbin	Jan. 16, 1912
1,875,107	Mueller	Aug. 30, 1932
1,937,227	Johnson	Nov. 28, 1933
1,961,394	Rothe	June 5, 1934
1,984,827	Derman	Dec. 18, 1934
2,034,115	Palen	Mar. 17, 1936
2,212,053	Smith	Aug. 20, 1940
2,316,892	Saul	Apr. 20, 1943
2,319,589	Drinkwater	May 18, 1943
2,347,754	Shay	May 2, 1944

FOREIGN PATENTS

Number	Country	Date
276,289	Germany	July 9, 1914
382,645	Great Britain	Oct. 24, 1932

OTHER REFERENCES

Lloyd: Outdoor and Fiber Furniture, Cat. No. 41–B, 1941, page 21, item No. TW–135–H.