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SHOCK ABSORBER OF SERVICE CART ✓

BACKGROUND OF THE INVENTION

The present invention relates to a roller-type shock absorber to be equipped in the rim of a service cart for serving in-flight meals on airplanes.

The in-flight meal server called a service cart for serving meals and beverages in a cabin of an airplane is equipped with a box-shaped body for storing trays, a caster mounted on the bottom portion of the body, and a space for positioning bottles and the like on the top portion of the body.

On the front and back sides of the body are equipped hinged doors, and on the front and back sides of the upper portion of the body are mounted handles for pushing the server.

SUMMARY OF THE INVENTION

The side wall surfaces of the box-shaped body are covered with a surface material of a decorative sheet and the like. Such surface material of the service cart may attract the attention of passengers, since it passes the eye level of the seated passengers.

Therefore, by displaying an advertisement or a trademark of a company, the company may effectively appeal to the passengers the service of the company.

However, the surface material of the service cart may easily be damaged, since the cart is used not only in the cabin,

but also on land for loading food and the like.

Since such damage to the surface attracts the attention of passengers, it is necessary to replace the surface material at once.

In the conventional service carts for serving in-flight meals, there were no means to prevent the damage on the surface of the service carts which may cause the passengers to feel unpleasant, but it was difficult to repair such damage to the surface.

Therefore, the present invention aims at providing a roller-type shock absorber for protecting the surface material or the rim portion of the service cart for serving in-flight meals.

The shock absorber on the service cart of the present device comprises a service cart equipped with a box-shaped body for storing trays mounting tableware, hinged doors mounted on the front and back sides of said body, and a caster mounted on the lower portion of said body, wherein the side wall surfaces of said body comprises a honeycomb panel and rim members mounted on both side rim portions of said honeycomb panel, and having rollers rotatably fixed to said rim members.

Moreover, the outer circumferential surface of the rollers are formed to have a size so as to protrude to the outer area than the corner portion of said body, and said rollers are formed of an elastic material such as rubber and the like.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a schematic view of the service cart for in-flight meals applying the present device; and

FIG. 2 is a cross-sectional view taken at line A-A of FIG. 1.

PREFERRED EMBODIMENT OF THE INVENTION

FIG. 1 is a schematic view of the service cart for serving in-flight meals applying the present device, and FIG. 2 is a cross-sectional view taken at line A-A of FIG. 1.

A service cart shown as a whole by the reference number 1 comprises a body 10 formed of a box-shaped panel material, and a caster 20 mounted on the lower portion of the body 10. On the front and back sides of the body 10 are mounted doors 30, which are supported by hinges 32 enabling the opening and closing movement of the door.

On the front surface of the door 30 is mounted a knob 34, and the lock of the door could be released by the operation of the knob 34.

The space 40 on the upper portion of the body 10 is used as a space for placing the bottles of beverages, ice, glasses and the like. Handles 50 are placed on the front and back sides of the upper portion of the body 10 so as to enable operation of the service cart.

The surface of the side walls of the body 10 is covered with a surface material 70. On the surface material are

displayed an appropriate design and the like.

As shown in FIG. 2, the door 30 is formed of a panel material having a honeycomb structure, and on the edge portion of the panel member is mounted a rim member 36. The rim member 36 is formed by extruding an aluminum alloy and the like. Similarly, the side wall surface of the body is formed of a honeycomb structured panel material 12, and on the surface thereof is fixed a surface material 70. On the rim portion of the side wall surface is also mounted a rim member 72. The rim member 72 is also formed by extruding an aluminum alloy and the like.

On the service cart, a plurality of shock absorbers 60 are mounted on the rim member fixed to the side wall surface. The shock absorber 60 comprises a cylindrical rubber roller structure for example, and mounted rotatably by a shaft 62. The outer circumferential surface 60a of the shock absorber 60 is formed to have a size so as to protrude to the outer area than the rim member 36 of the door 30 or the outer rim of the rim member 72 on the side wall surface.

Therefore, when a plurality of service carts 1 are positioned adjacent to one another, the shock absorbers 60 mounted on each body will contact the other shock absorbers on another body, and will prevent the occurrence of damage caused by the rim members of carts being collided to each other.

Moreover, even when the service cart contacts other machinery and the like during movement of the cart, the

existence of the shock absorbers 60 prevents the collision to the surface material or the rim member, and thereby effectively protects the service cart 1.

Therefore, the surface material 70 is adhered and supported to its position by magnets 80. According to such structure, the surface material 70 could be removed from the magnets 80 on the side wall panel 12, which enables easy maintenance or replacement thereof.

As explained above, the present invention provides a service cart to be used in a cabin of an airplane and the like having a roller-type shock absorber for protecting the rim portion or the surface material of the side wall, which could easily be damaged and could easily attract the attention of passengers.

According to the device, the service cart could always be maintained to an aesthetically high quality at all times, and the improvement of services could be achieved.



CLAIMS

1. A shock absorber of a service cart, said service cart comprising a box-shaped body for storing trays mounting tableware, hinged doors mounted on the front and back sides of said body, and a caster mounted on the lower portion of said body, wherein;

the side wall surface of said body comprises a honeycomb panel and rim members mounted on the both side rim portions of said honeycomb panel, and having rollers mounted rotatably to said rim members.

2. A shock absorber of a service cart according to claim 1, wherein the outer circumferential surface of said rollers are formed to have a size so as to protrude to the outer side than the corner portion of said body.

3. A shock absorber of a service cart according to claim 1 or claim 2, wherein said rollers are formed of an elastic material such as rubber.