March 3, 1936. J. B. ECK 2,032,532

COASTER WAGON

Filed May 11, 1934

Fig. 1.

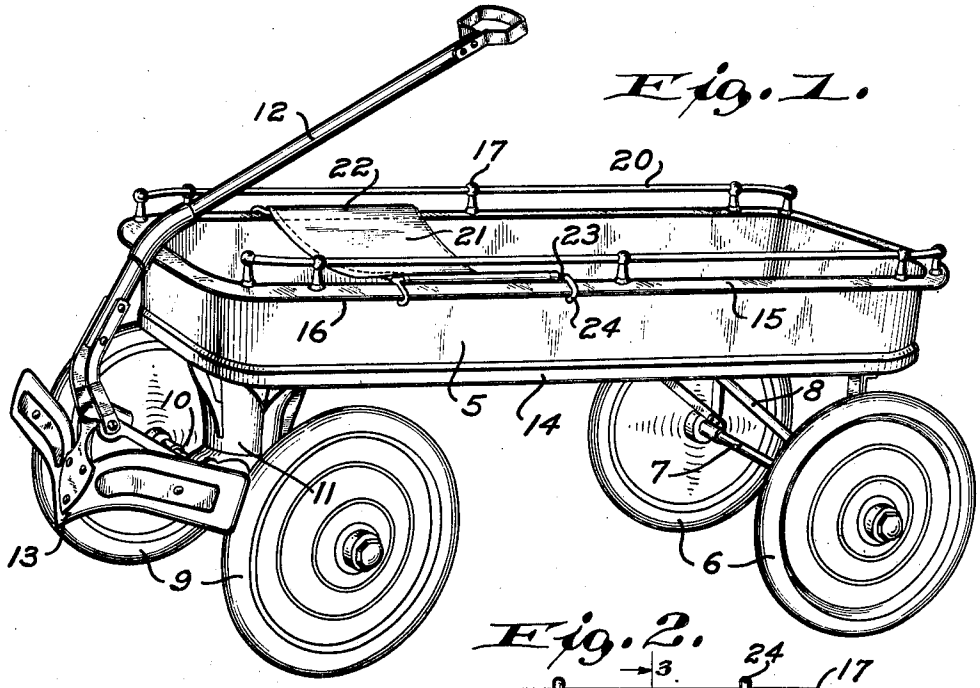


Fig. 2.

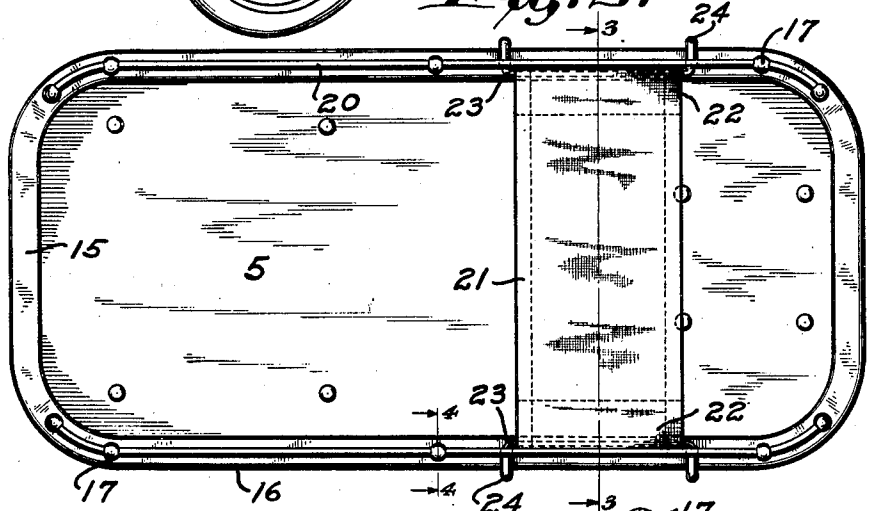


Fig. 3.

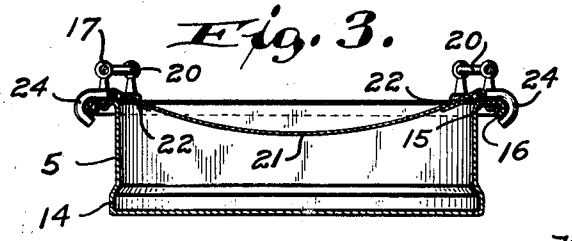
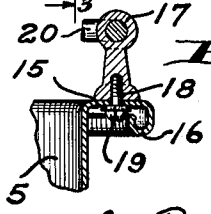


Fig. 4.



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COASTER WAGON

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4 Claims. (Cl. 296—28)

The present invention relates in general to improvements in the art of toy manufacture, and relates more specifically to improvements in the construction of vehicular toys such as coaster wagons.

Generally defined, an object of the present invention is to provide a durable and attractive coaster wagon, which is comfortable and flexible in use.

A more specific object of the invention is to provide an improved one-piece metal body construction for coaster wagons or the like, which may be readily manufactured to provide an extremely rigid structure.

Another specific object of the invention is to provide an improved top flange construction for coaster wagon bodies or the like, which besides enhancing the attractive appearance of such devices, will also increase their durability.

A further specific object of the invention is to provide an improved rail support for attaching the side rail carrier posts to the upper edge or flange of a coaster wagon or the like, in an effective and simple manner.

An additional specific object of the invention is to provide an improved adjustable knee-pad or seat cooperable with the upper side edges or flanges of a coaster wagon body so as to augment the comfort of the user of the wagon.

Still another specific object of the invention is to provide an improved flexible pad structure which is adjustably and removably cooperable with the side body flanges of a pusher type of toy wagon, and which serves to protect the clothing of an operator.

These and other specific objects of the invention will be apparent from the following detailed description.

A clear conception of embodiments of the various improved features, and of the mode of constructing and operating coaster wagons built in accordance with the invention, may be had by referring to the drawing accompanying and forming a part of this specification in which like reference characters designate the same or similar parts in the various views:

Fig. 1 is a front and side perspective view of an improved coaster wagon, showing the knee-pad disposed toward the front of the vehicle;

Fig. 2 is a full top view of the body of the coaster wagon shown in Fig. 1, with the knee pad shifted toward the rear of the body;

Fig. 3 is a transverse vertical section through the body and knee-pad of the coaster wagon, taken along the line 3—3 of Fig. 2; and

Fig. 4 is an enlarged transverse vertical section through the top flange and side rail of the coaster wagon body, taken along the line 4—4 of Fig. 2.

While the invention has been shown and described herein as being specifically applied to a particular type of toy coaster wagon, it is not intended to restrict the scope by such specific disclosure, since some of the features may obviously be more generally applicable to other types of vehicular toys.

Referring to the drawing, the coaster wagon shown therein comprises in general a one-piece body 5 formed of sheet metal with the aid of dies; rear wheels 6 mounted to rotate upon a rear axle 7 carried by metallic brackets 8 secured to the rear of the body 5; front wheels 9 mounted to rotate upon a front axle 10 coacting with the front of the body 5 through a fifth wheel mechanism 11; and a manipulating handle 12 pivotally associated with the front axle support. The front axle support may also be provided with a streamline bumper 13 as shown in Fig. 1, and the handle 12 may either be swung forwardly for pulling or rearwardly over the body for coaster purposes, in a well-known manner.

As previously indicated, the body 5 is preferably formed of a single sheet of metal, and the continuous side wall of this body connects with the bottom thereof through a continuous outwardly projecting bead 14 which besides giving the body structure an attractive appearance, also enhances the stiffness of the lower portion of the side wall. The top of the continuous side wall 14 is bent outwardly to provide a relatively wide continuous top flange 15, and the outer edge of this flange is bent downwardly so as to produce a marginal rim 16 which in addition to giving the flange 15 a relatively massive appearance, also cooperates with the flange to add rigidity to the upper portion of the side wall of the body 5. The top of the flange 15 is flat and is disposed in a plane substantially parallel to the bottom of the body, and the bead constituting the marginal rim 16 may be formed by slitting the metal at the corners and subsequently bending the free edge of the flange 15 downwardly and inwardly as shown in Fig. 4 so as to provide a bead of considerable diameter, thus giving the entire top flange structure a heavy and substantial appearance.

The flange 15 may, if desired, be provided with a series of openings located midway between the rim 16 and side wall of the body 5, and a side rail supporting post 17 is attached to the flange 15 at each of these openings by means of a screw

18 and lock washer 19, as illustrated in Fig. 4. The side rails 20 are rigidly attached to the upper extremities of the posts 17 and are spaced from the top surface of the flange 15 sufficiently to permit ready gripping. In some cases, superimposed side and end rails may also be provided in order to enhance the attractive appearance of the vehicle, and the rim 16 obviously serves to conceal the screws 18 and washers 19 besides providing a stiff flange structure for supporting the rails 20.

Besides strengthening the body 5 and providing a support for the rail posts 17, the flange 15 and rim 16 also serve as supports for a seat or knee pad 21 of improved construction, shown in Figs. 1, 2 and 3. The pad 21 is formed of a strip of heavy fabric or leather, and has opposite looped ends 22 which engage hooked end supports 23 the hooks of which are covered with rubber protectors 24 and are adapted to engage the flange 15 and rim 16 as shown in Fig. 3. The medial portion of the pad 21 may sag toward the bottom of the body 5 but preferably does not touch the same, and the pad structure may be adjusted along the side portions of the flange 15 or entirely removed, as illustrated in Figs. 1 and 2. The pad 21 is primarily intended to provide a soft protective bearing for the knee of an operator, but may also be used as a seat, and will obviously protect the operator's clothing. The side wall and top flange structures of the one-piece metal body 5 will effectively resist distortion of the body structure due to application of downward pressure against the pad 21, and the rail 20 assists in preventing the pad supports 23 from jumping out of place while permitting convenient adjustment of the pad.

From the foregoing description it will be noted that the present invention provides a durable and attractive coaster wagon construction, which is both comfortable and flexible in use. The body structure may be attractively decorated and the rails 20 may be nickel-plated or otherwise decorated, to provide an extremely attractive toy which will readily resist the abuse that such structures are usually subjected to. The top rail 20 may in some cases be entirely omitted, but the knee pad 21 is an important adjunct since it not only enhances the comfort of the operator, but also protects the clothing and especially the knees of the stockings. The one-piece metal body construction besides being durable, provides an effective support for the pad 21 which is conveniently adjustable along the top flange and marginal rim, to any desired position. The entire structure may be readily manufactured and sold at moderate cost, and has proven highly successful in actual commercial use.

It should be understood that it is not desired to limit the invention to the exact details of construction herein shown and described, for various modifications within the scope of the claims may occur to persons skilled in the art.

It is claimed and desired to secure by Letters Patent:

1. A coaster wagon body, comprising, a single seamless sheet of metal having a continuous upwardly projecting wall connected at its lower end to a flat bottom by means of a continuous outwardly projecting bead formed integral with the wall and bottom, and also having a relatively wide top flange formed integral with the upper end of the wall and projecting outwardly over the bead, said flange being of substantially the same uniform thickness as said wall and having its marginal edge spaced a considerable distance outwardly from said wall and bent downwardly and inwardly to provide a depending rim; and hand rail supporting posts secured to said flange between said depending rim and said wall, the fastenings for said posts being concealed by said rim.

2. A coaster wagon body, comprising, a single sheet of metal having a continuous upwardly projecting wall including elongated straight side portions connected at their lower ends to a bottom by means of outwardly projecting beads formed integral with the side portions and bottom, and also having relatively wide top flanges formed integral with the upper ends of said side wall portions and projecting outwardly therefrom, said flanges having their marginal edges spaced considerable distances outwardly from the adjacent wall portions and bent downwardly and inwardly to provide depending rims; and hand rail supports secured to said flanges between said rims and said wall portions.

3. A coaster wagon body, comprising, a single seamless sheet of metal having elongated rectilineal side walls integrally interconnected by end walls to provide a substantially rectangular continuous wall connected at its lower end to a bottom by means of a continuous outwardly projecting bead formed integral with said continuous wall and bottom, and said side walls also having relatively wide outwardly projecting top flanges formed integral with their upper ends, said flanges having their marginal edges spaced considerable distances outwardly from the corresponding side walls and bent downwardly and inwardly to provide depending side rims.

4. A coaster wagon body, comprising, a single seamless sheet of metal having elongated rectilineal side walls integrally interconnected by end walls and connected at their lower ends to a bottom by means of outwardly projecting beads formed integral with said side walls and bottom, and said side walls also having relatively wide outwardly projecting top flanges formed integral with their upper ends, said flanges having their marginal edges spaced considerable distances outwardly from the corresponding side walls and bent downwardly and inwardly to provide depending side rims; and hand rail supporting posts secured to said flanges between said rims and said side walls.

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