Oct. 28, 1969 S. B. BOSTER 3,474,563

WHEEL CONSTRUCTION KIT FOR TOY VEHICLES

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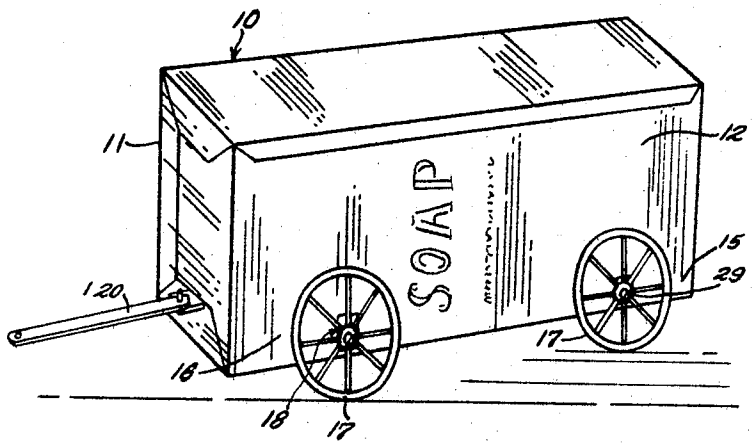


Fig. 1

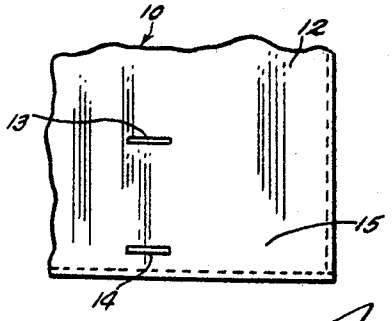


Fig. 2

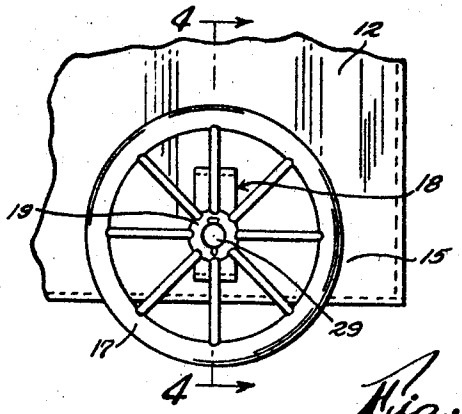


Fig. 3

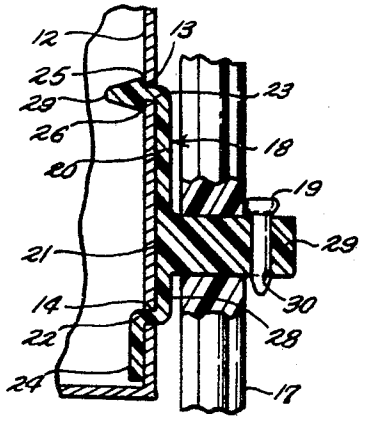


Fig. 4

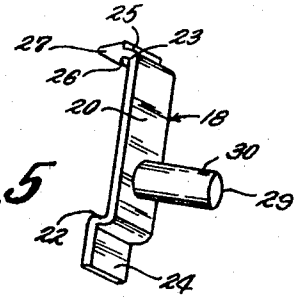


Fig. 5

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WHEEL CONSTRUCTION KIT FOR TOY VEHICLES

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U.S. Cl. 32—11 1 Claim

ABSTRACT OF THE DISCLOSURE

A plastic wheel mount furnished in knockdown condition for assembly onto a conventional cardboard container, or the like. The mount consists of a bracket having a simplified connecting means for fastening to a cardboard container and having integrally secured thereto a wheel axle.

The present invention relates to toys and is directed to a wheel construction kit particularly adapted to convert a conventional cardboard shipping container, or the like, into a wheeled toy.

An object of the invention is to provide an extremely simplified and inexpensive kit comprising a number of plastic parts which when assembled and mounted by a child on a conventional box container provides a rugged wheeled toy.

Another object of the invention is to provide a novel wheel axle mounting bracket that has integral end members which cooperate with the planar wall of a box-type container to fasten said bracket firmly on the box.

Other objects of the invention will become apparent from the following specification taken in conjunction with the accompanying drawing, which depicts a preferred embodiment thereof, and wherein:

FIG. 1 is a perspective view of a cardboard shipping container supplied with the assembled wheel construction kit of this invention.

FIG. 2 is a fragmental, elevational view of a bottom corner of the shipping container shown in FIG. 1.

FIG. 3 is a view similar to FIG. 2 with a wheel mounted thereon with my kit parts.

FIG. 4 is an enlarged section taken on line 4—4 of FIG. 3.

FIG. 5 is a perspective view of the wheel axle mounting bracket of the invention.

With reference to FIG. 1 the numeral **10** indicates a cardboard box of conventional construction generally used for packaging and shipping cleansers or detergents in granulated or powdered forms. The container has at least two interconnected planar side walls **11** and **12** and as illustrated in FIGS. 2 and 3 each side wall has a pair of vertically spaced, horizontal slots **13** and **14** formed through each of the lowermost corners **15** and **16** thereof. These slots may be pre-formed in the container side walls before the container is filled with a packaged, granular material or closed slits may be formed at the slot locations or preferably parallel lines may be printed at the places for the slots and the slots cut therein along the lines just prior to the construction of the wheeled toy and after the box contents have been depleted.

It is contemplated that my wheel construction kit may comprise four (4) wheels **17**, four (4) wheel axle mounting brackets **18**, four (4) pins **19**, and preferably a draw bar and mount **120**; all molded in a flat plastic form and integrally held together by reduced severable connections. The flat plastic form may be packaged inside the shipping container **10** along with its detergent contents as a give-away item, if desired.

All four of the brackets **18** are identical and only one need be described for a clear understanding of the invention. As best shown in FIGS. 4 and 5 the wheel axle mounting bracket **18** is made of a plastic material and has a flat central portion **20** adapted in operative position to have one major face **21** in engagement with that portion of the exterior face of the container side wall disposed between the slots **13** and **14**. Each end of the central bracket portion is provided with an inturned lug portion **22** and **23** projecting at right angles from the central portion on the side of the major face **21**. The lower lug portion **22** is adapted to pass through the slot **14** in the wall **12** and has a planar projection **24** extending at right angles from its free end in a direction away from and parallel to the central portion **20**. As illustrated in FIG. 4 the outer face of the projection bears against the inside face of the container wall **12**, it being noted with reference to FIG. 4 that the disposition of the central portion **20** and the projection **24** maintains the bracket in a fixed position on the wall **12**.

The upper lug portion **23** on the bracket is formed with a pair of opposed shoulders **25** and **26** which have an overall dimension greater than the width of the slot **13** whereby when the bracket is in mounted position the shoulders engage that portion of the interior face of the side wall adjacent said slot. The lug portion **23** is provided with a pointed leading end **27** to open the slot **13** for entrance and passage of the shoulders **25** and **26** therethrough.

The outer major face **28** of the central portion has a wheel axle **29** projecting at right angles therefrom, said axle being adapted to mount the wheel **17** thereon for rotatory movement, a pin **19** being forced into a hole **30** in the axle to prevent axial displacement of the wheel.

In order to construct a wheeled toy with my kit it is only necessary to insert the projection **24** on the bracket **18** into the lower slot **14** and then force the pointed end **27** of the projection **23** into and through the upper slot **13**, the shoulders **25** and **26** thus temporarily forcing open the slot sides **13** and then being positioned behind the slot sides to provide a strong and relatively permanent mounting for the bracket. After all the brackets are in place on the container the wheels **17** may be mounted on their respective axles **29** and the pins **19** forced into position to hold the wheels on their axles. The draw-bar **120** may thereafter be connected to the front of the wheeled toy, if desired.

What is claimed is:

1. The combination package and toy comprising a container having interconnected side panels, a pair of vertically spaced, horizontal slots formed in the lower corners of the side panels, a unitary wheel axle mounting bracket having a flat central portion, a wheel receiving axle projecting at right angles from one major face of the central portion, a laterally extending lug portion on each

end of the central portion, one lug portion extending through the lower slot and having a flat projection formed on its free end extending away from and parallel to the central portion, the other lug portion extending through the upper slot and having a pair of opposed shoulders with an overall width greater than the width of said slot, said other lug portion having a pointed leading end adapted to enter and spread apart said slot sides for entrance of the lug into locked position behind said sides whereby the bracket projection will bear against the inside face of the panels while the major face of the central portion opposite the axle will bear against the outside face of the panels to firmly mount the brackets on the panel.

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