[54] HIGH-STABILITY WHEELED PUSH

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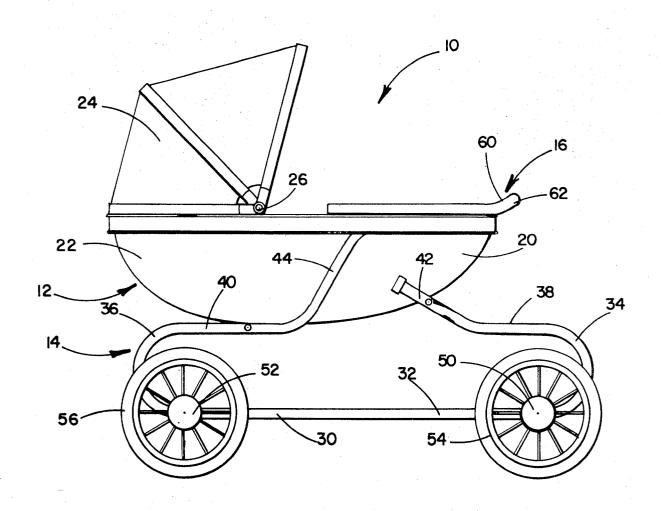
•	DEVICE	
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		<b>280/47.38,</b> 296/28 E
		earch 280/47.38, 47.34, 47.37 296/1 B, 28 E
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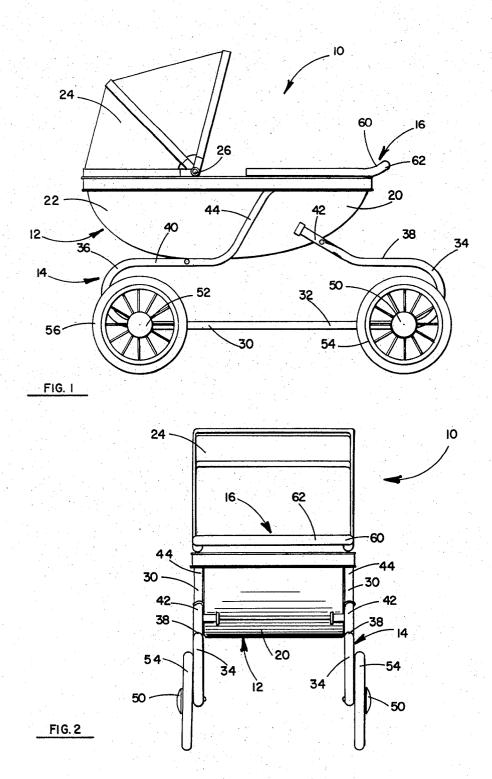
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[57] ABSTRACT

A high-stability wheeled push device which may provide a baby carriage, a toy carriage for a doll, or a walker for a child learning to walk. The device comprises a body or carrier section for receiving a child or doll therein, a support frame or carriage section for supporting the carrier, and a pair of front wheels and a pair of rear wheels each rotatably supported on transversely extending generally horizontal axle means. Pushing means in the form of a transversely extending gripping portion or bar is secured to the rear end of the carrier section for hand pushing the device. The rear wheel axle means is disposted rearwardly of the gripping bar of the pushing means so that downward push on the pushing bar will not tend to tip or tilt the device by pivoting it about the rear wheels so as to lift its front end up into the air. Thus, a wheeled pushed device of excellent stability is provided.

6 Claims, 2 Drawing Figures





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## HIGH-STABILITY WHEELED PUSH DEVICE

Heretofore, buggies have been built in a generally symmetrical manner with both front and rear wheels disposed below the carriage section, and with the pushing handle extending rearwardly of the rear wheels so 5 that downward pressure on the handle resulted in often unexpected raising up of the front end of the buggy to the surprise and dismay of the user. Such an unstable or tiltable condition is undesirable in a carriage containing a child because of the unexpected and unde- 10 sired jolt imparted to the child when such tilting takes place. It is also undesirable for a toy baby carriage since the child user will be upset and disturbed when this tilting or tipping takes place to her surprise. It will be appreciated that when pushing a buggy or standing with 15 the buggy, there is a natural tendency to lean on the pushing handle and to thereby place a downward component of force on the handle without intending or realizing the same is being done. Further, because of the four wheel stable looking configuration of the normal 20 buggy, the user is lulled into a sense of false security and would usually not be prepared for the tipping action.

With regard to walkers for children learning to walk, the existing devices tend to be almost soley functional 25 and therefore uninteresting for the child.

The wheeled push device of the present invention contemplates a buggy construction of very high stability that may provide a walker, a child's toy doll carriage, or a baby carriage. In this device the rear axle is disposed rearwardly of the pushing handle or bar so that downward pressure on the bar will merely firmly set the device on its four wheels since such pressure is between the front and rear wheel axles means and is not at the end of a lever arm outwardly of either of 35 those axles means.

In the drawings:

FIG. 1 is a side view of a stable buggy comprising a presently preferred form of the present invention.

FIG. 2 is a rear end view of the buggy of FIG. 1.

Referring to the drawings, a presently preferred form of wheeled push device of the invention is shown as buggy 10. The buggy 10 comprises generally a carrier section 12, a carriage assembly or section 14 which is connected to and supports the carrier section in an elevated position, and pushing means 16 secured to the rear end of the carrier section.

The carrier section 12 may be of any conventional configuration. It is shown as a generally hollow basket shape, open across the top and having a rear end 20 and a front end 22. A hood section 24 may be pivotally mounted as at 26 to the forward part of the carrier section.

The illustrated carriage assembly 14 comprises a pair of side members 30. Each of the side members 30 is disposed adjacent one side of the carrier section 12. The illustrated numbers 30 are in the form of formed or bent rod or bar so that it is generally continuous. Each illustrated side member includes an elongated horizontally extending bottom portion 32, a curved rear end portion 34, and a curved front end portion 36. Each member further includes a generally horizontal rear upper portion 38, and a generally horizontal front upper portions 38 and 40 are angled upwardly and connected at their respective inner ends to the carrier section. The rear angle portion is designated 42 and the

front angle portion is designated 44 in the drawings. The illustrated side members 30 are identical and therefore the description of one will suffice for the description of the other.

Wheel means are mounted at the front and rear of the carriage assembly 14. More particularly, a transversely extending horizontal rear axle 50 is rotatably mounted on the rear-most end of each of the bottom portions 32 of the side members 30. Similarly, a transversely extending horizontal front axle 52 is rotatably mounted on each of the opposed side members 30 at the forward-most ends of the bottom portions 32. A suitable pair of rear wheels 54 may be mounted on the outer ends of the rear axles 50, while a pair of front wheels 56 may be mounted on the outer ends of the front axles 52. The wheels 54 and 56 rest upon the ground or other supporting surface and will rotate incident to movement, forward or backward, of the buggy. It will be noted that an open space is thereby created at the rear of the buggy between the rearwardly extending portions of the side members 30 so there is no rear axle extending transversely across between the side members for the user to trip over.

The side members 30 may be constructed in whole or part of resilient material, such as metal rod or may be resiliently mounted to cushion the ride received by the occupant of the carrier section. Alternately, the axles and/or wheels may be resiliently mounted for absorption of shock at that point.

The pushing means 16 comprises, in the illustrated device, a generally U-shaped handle bar 60 having a transversely extending grip portion 62 adapted to be gripped by the user for pushing the buggy.

It will be noted particularly that the grip portion 62 is disposed forwardly of the rear axle means 50. This is achieved in the illustrated buggy by elongation of the lower portions 32 and the upper rear portions 33 at their rearward ends to form a rearward extension of the carriage assembly and thereby position the rear axle means 50 substantially further rearward than in the usual buggy construction. As noted above, this arrangement prevents inadvertent tipping of the buggy by downward leaning or pushing on the grip portion 62 to inadvertently flip or throw the forward end of the buggy upwardly and the rearward end downwardly; since the grip portion 62 is located intermediate the rear axle means 50 and the front axle means 52, downward pressure on that grip portion 62 does not cause a tilting, tipping, or levering effect as in the normal buggy. At the same time, as noted above, the buggy is constructed to be centrally open at its rear end to avoid the user triping over a rear axle.

Thus, the illustrated wheeled push device can take the form of a baby carriage to transport a chilld, of a child's toy carriage for her doll, or of a walker for a toddler learning to walk; in all cases a highly stable structure is provided.

I claim:

1. A stable wheeled carriage comprising:

a carrier section having a front end and a rear end, a carriage assembly connected to the carrier section

- a carriage assembly connected to the carrier section for supporting the latter in an elevated position and having fixed-location transversely extending rear wheel axle means adjacent the rear end of said carrier section, and
- a pushing means secured to the rear end of the carrier section and including a gripping portion com-

prising a transversely extending bar, said gripping portion being disposed entirely forwardly of said rear wheel axle means, the latter means being configured to permit access to said gripping portion of said pushing means without interfering with a person utilizing the gripping portion.

2. The device of claim 1 wherein said carriage assembly includes rearward extension means on which said

rear wheel axle means is mounted.

3. The device of claim 2 wherein said rear extension 10 means comprises a pair of spaced apart members, said rear wheel axle means comprising a rear axle mounted on each of said members, whereby an open spaced is defined at the rear of the device between said rear axles

and between said two members.

- 4. The device of claim 2 wherein said carriage assembly comprises a pair of spaced apart side means disposed adjacent opposite sides of said carrier section, each of said side means having a portion thereof defining a rearward extension means, whereby an open space is defined at the rear of the device between said two extension means.
- 5. The device of claim 4 wherein each side means is in the form of a generally continuous rod.
- 6. The device of claim 5 wherein said side means are constructed of a resilient material.

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