

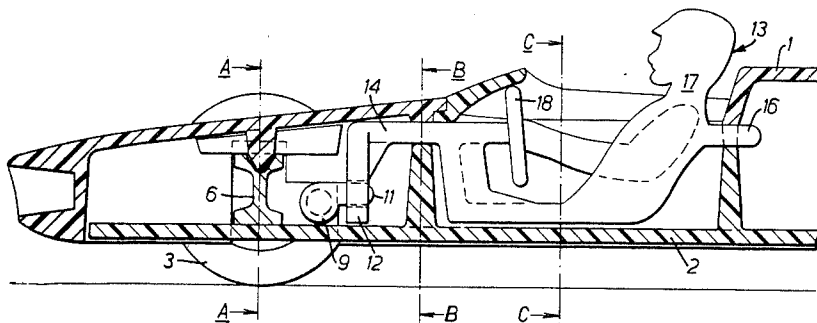
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 [33] **Great Britain**
 [31] **19041/68**

[50] Field of Search..... 46/201,
 202, 204, 100, 106, 107

[56] **References Cited**
UNITED STATES PATENTS
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Primary Examiner—Louis G. Mancene
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[54] **TOY VEHICLES**
2 Claims, 8 Drawing Figs.
 [52] U.S. Cl..... 46/202
 [51] Int. Cl..... A63h 11/10

ABSTRACT: A toy vehicle having a pair of steerable road wheels and mechanism for producing steering movement of those wheels, the operating member of the steering mechanism being shaped and positioned to simulate the driver of the vehicle.



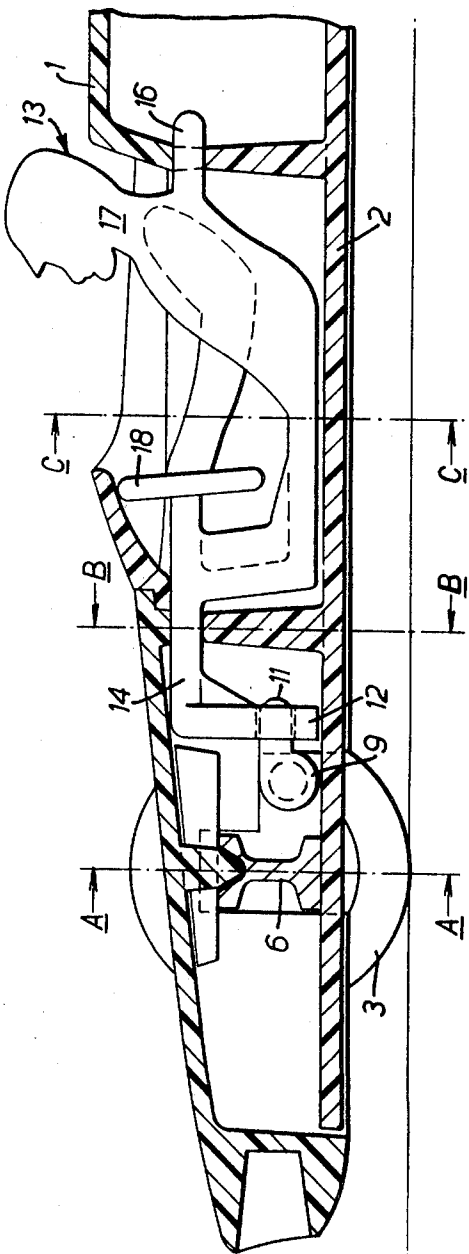


FIG. 1.

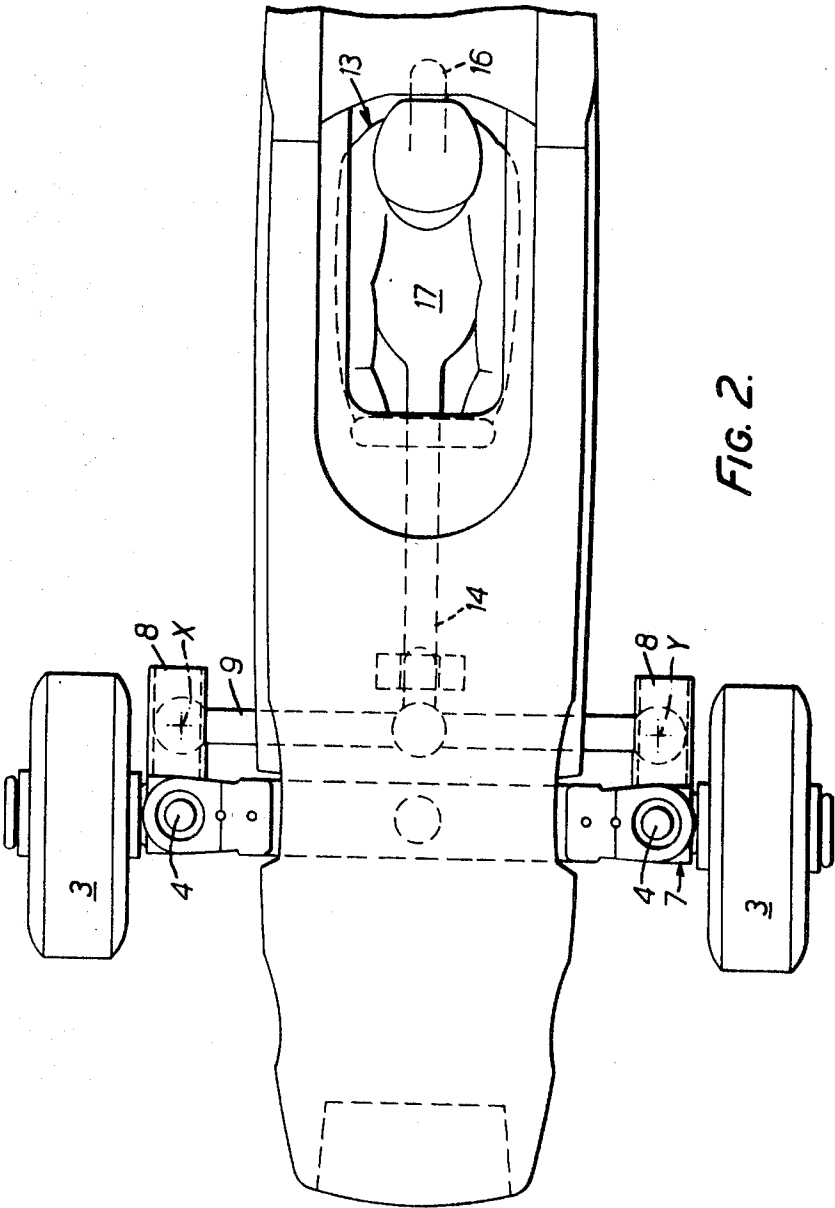
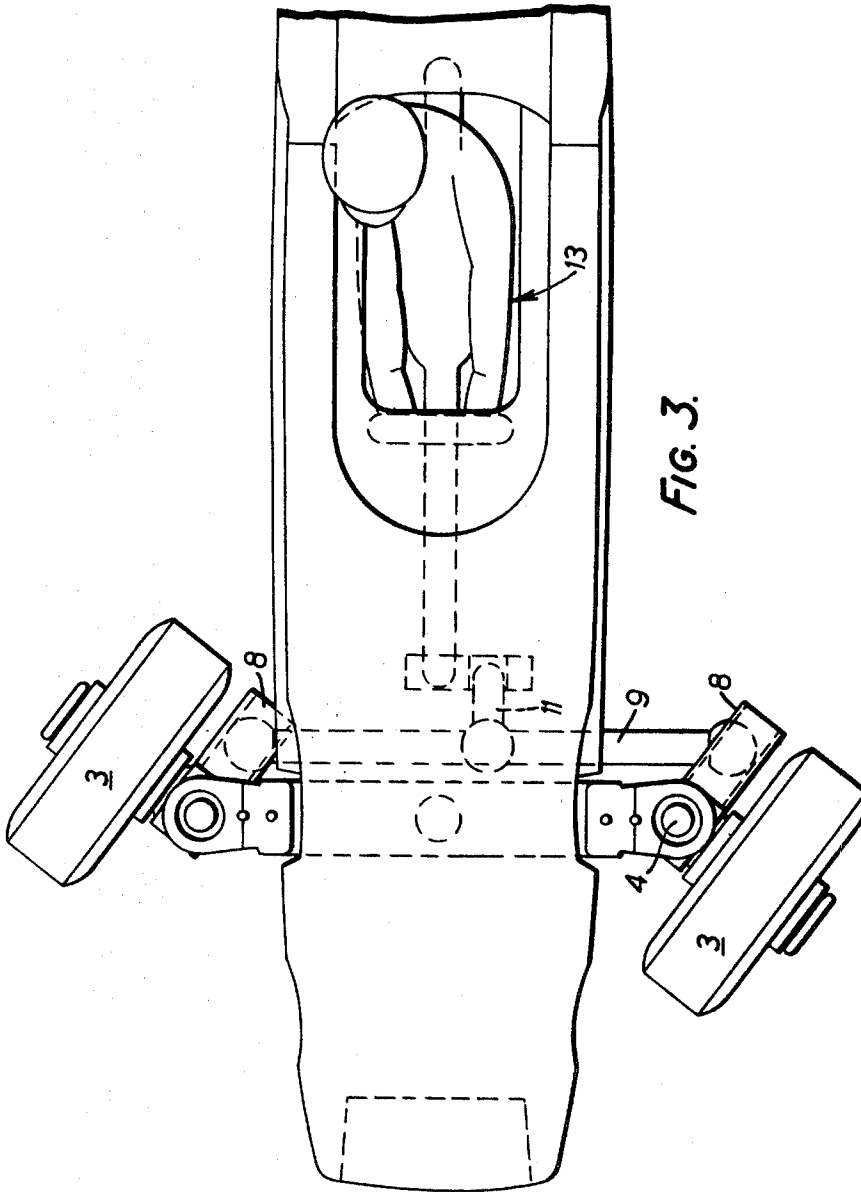


FIG. 2.



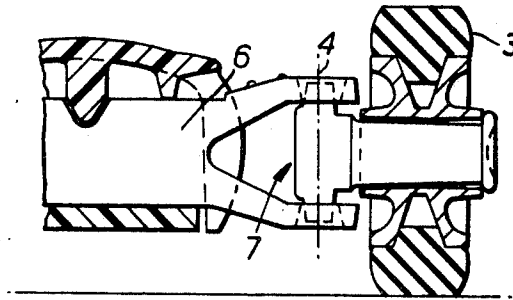


FIG. 4.

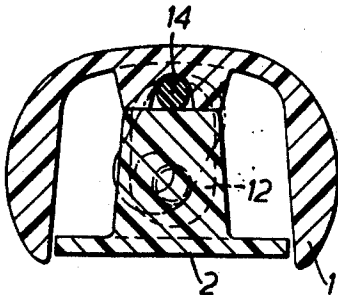


FIG. 5.

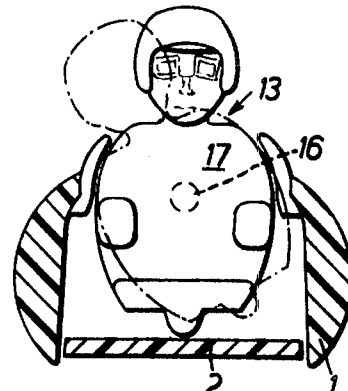


FIG. 6.

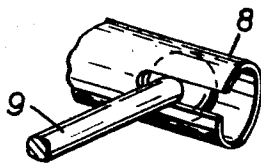


FIG. 7.

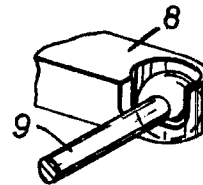


FIG. 8.

TOY VEHICLES

This invention relates to toy vehicles having steerable road wheels.

The object of the invention is to provide a toy vehicle of simple construction in which the figure of a driver is arranged to move in a realistic manner as the vehicle is steered around a bend.

In accordance with the invention a toy vehicle having a pair of steerable rod wheels and mechanism for producing steering movement of those wheels has the operating member of the steering mechanism shaped and positioned to simulate the driver of the vehicle.

A particular embodiment of the invention will now be described, by way of example only, with reference to the accompanying drawings, in which:

FIG. 1 is a sectional elevation of the forward part of the toy vehicle;

FIGS. 2 and 3 are plan views;

FIGS. 4, 5 and 6 are sections on the lines AA, BB and CC respectively of FIG. 1; and

FIGS. 7 and 8 are scrap perspective views of two alternative constructional details of the steering mechanism.

The toy vehicle illustrated representing an open racing car, comprises a hollow die-cast body 1 closed from below by a die-cast chassis plate 2. The front road wheels 3 of the vehicle are supported for steering movement about vertical axes 4 by forked brackets formed at the outer ends of a transverse support member 6 secured to the body. Each wheel is mounted on a stub axle forming part of an L-shaped steering bracket 7, the elbow of which has vertical trunnions locating in the forked brackets, and the other arm of which forms a trailing arm 8 receiving the adjacent ball end of a track rod 9. At its center, the track rod has a short rearward projection 11 which extends freely through a drop arm 12 forming part of an operating member generally indicated at 13. The operating member has two aligned rodlike trunnion sections 14 and 16 journaled for rotation about a longitudinal horizontal axis in the parti-

tions simulating forward and rear bulkheads.

Between the portions 14, 16, the operating member is shaped to simulate the head, the arms and the upper part of the body of a seated driver 17 and a steering wheel 18, grasped by the driver.

To steer the vehicle, say to the right, the head of the FIG. 17 is moved to the right (rocking the member 13 about the axis of portions 14, 16 in a clockwise direction, as viewed from the rear) which causes the drop arm 12 to swing to the left, moving the track rod 9 and trailing arms 8 to the left (FIG. 2) and causing the wheels to steer to the right. Opposite movement of the operating member will, of course, produce steering movement to the left. The result is a realistic impression of a racing driver steering his vehicle and leaning in towards the bend to be negotiated.

FIGS. 7 and 8 show two alternative ways of constructing the trailing arms 8 and their connections with the track rod 9. In FIG. 7, the ball end of the track rod is received in a tubular trailing arm 8 having a slot to admit the track rod adjacent the ball end. In FIG. 8, the ball end nests in a recess open from above and from one side formed in the trailing arm.

I claim:

1. In a toy vehicle including a body, a pair of steerable road wheels mounted in said body, a steering mechanism operatively coupled to said road wheels for effecting steering movements thereof, and a unitary operating member shaped to simulate a seated driver and steering wheel, the improvement which comprises trunnion means mounting said unitary member on said body for pivotal movement about a horizontal axis extending longitudinally of said body, and means operatively connecting said operating member to said steering mechanism so that manual rocking of said operating member about said axis effects operation of said steering mechanism.

2. The improved toy vehicle of claim 1 wherein said steering mechanism includes a track rod interconnecting said steerable road wheels and wherein said operating member has an integral, downwardly extending drop arm, the lower end of which is engaged with said track rod.

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