

PATENT SPECIFICATION

971,782

971,782



Inventor: ANDRE ALBERT GILLERON.

Date of filing Complete Specification: December 31, 1962.

Application Date: January 1, 1962.

No. 9/62.

(Patent of Addition to No. 891,681 dated April 8, 1960).

Complete Specification Published: October 7, 1964.

© Crown Copyright 1964.

Index at Acceptance:—A6 S (19A1C, 19D6, 19D7).

International Classification:—A 63 h.

COMPLETE SPECIFICATION

DRAWINGS ATTACHED

Improvements in or relating to Toy Model Vehicles

We, MECCANO LIMITED, of 236, Binns Road, Liverpool, 13, Lancashire; a British company; do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention concerns miniature toy vehicles and in particular arrangements in such vehicles for permitting pivoting of an axle to provide a steering effect of the type described and claimed in the applicants' patent No. 891,681.

In the specification of British patent No. 891,681 there is described and claimed a toy motor vehicle in which the axle for at least the front wheels passes through slots in upstanding lugs on opposite sides of the vehicle floor plate, which slots have rearward upwardly inclined extensions, and a spring acting on the axle urging it to assume a normal position for straight line movement of the vehicle at the bottom of the inclined extensions of the slots.

Such a vehicle comprises a stamped out sheet metal base plate and the upstanding lugs are bent up from the stamping having been slotted for the reception of the front and rear axles.

It has now been found more satisfactory to produce the base plate from a casting of metal or to make it from moulded plastics material.

According to the present invention, a toy motor vehicle as claimed in the British Patent No. 891,681 comprises a unitary base plate having upstanding wall portions adjacent to the front axle and cut-out portions in the upstanding walls, the sections of walls in which the cut-outs are located projecting laterally at either side of the base plate.

In one embodiment of the invention the base plate is diecast and the upstanding

walls are generally arcuate in plan extending outwardly from the main portion of the base plate, the cut-outs being provided in the arcuate portion and being open at their upper ends; a top casting for the toy vehicle is provided with arcuate downwardly depending ribs co-operating with the base plate thereby forming an upper surface to prevent the axle from riding out of the vehicle completely.

In another embodiment of the invention the base is made of a plastics material preferably by injection moulding, the upstanding walls at both sides of the front axle being provided with generally wedge-shaped slots larger at the rear end than the forward end.

The invention will now be described further, by way of example, with reference to the accompanying drawings, in which:—

Fig. 1 is an exploded view of the front axle of a toy motor vehicle incorporating the features of the present invention;

Fig. 2 is a perspective view of the base plate, front and rear axles of another embodiment of the toy motor vehicle; and

Fig. 2a is a detail of the base plate in the region of the rear axle.

The embodiment shown in Fig. 1 is suitable for diecasting and comprises a base plate 11 having integral side walls 12. The front axle 13 is retained in position on the base plate by means of two longitudinally disposed studs 14 and a spring 16 secured to the base plate of the vehicle by any suitable means; in the region of the axle 13 the base plate has two arcuate lateral extensions 11a and cut-outs 17 are provided in the upstanding wall portions 12a thereof. The coach work of the vehicle generally indicated at 18, only a section of which is shown, is provided with two depending ribs 18a adapted to co-operate with the upstanding wall portions 12a.

[Price 4s. 6d.]

The embodiment shown in Fig. 2 is suitable for plastics injection moulding and comprises a base plate generally denoted by 21 and having integral upstanding walls 22. 5 Spring members are formed by moulding two generally rectangular tongues 23 adapted, when under load, to lie over a rear axle 24 of the toy vehicle. At the front end, the base plate 21 is formed so as to 10 have a generally rectangular portion 25 and a generally circular portion 25a, the generally circular portion being adapted to lie over a front axle 26 of the vehicle.

Near the rear end of the toy motor vehicle 15 the upstanding wall 22 is extended downwardly at 27 on either side of the rear axle 24 so as to locate this member in position.

Additionally, the base plate 21 is moulded as shown at 21a to limit downward movement and to retain the axle 24. 20

Adjacent to the front axle the upstanding wall 22 is extended upwardly of the general upper plane of the wall 22 and is also formed so as to be arcuately outwardly curved at 25 22a from the general longitudinal plane of the wall. Generally wedge-shaped slots 28 are formed in the arcuate portions of the upstanding walls 22a.

WHAT WE CLAIM IS:—

30 1. A toy motor vehicle as claimed in British Patent No. 891,681 comprising a unitary base plate having upstanding wall portions adjacent to the front axle and cut-out portions in the upstanding walls, the 35 sections of walls in which the cut-outs are located projecting laterally at either side of

the base plate.

2. A toy motor vehicle as claimed in Claim 1, in which the base plate is die-cast and the upstanding walls are generally arcuate 40 in plan extending outwardly from the main portion of the base plate, the cut-outs being provided in the arcuate portion and being open at their ends.

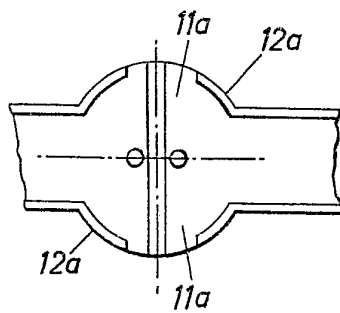
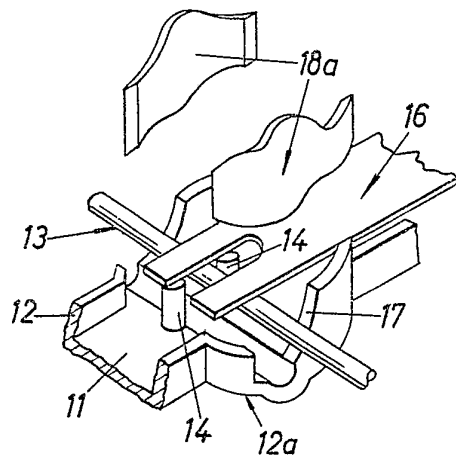
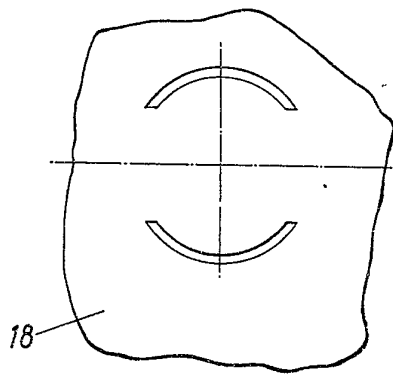
3. A toy motor vehicle as claimed in Claim 1 or 2, in which a top casting therefor 45 is provided with arcuate downwardly depending ribs adapted to co-operate with the base plate and thereby forming an upper surface to prevent the axle from riding out 50 of the vehicle.

4. A toy motor vehicle as claimed in Claim 1, in which the base is made of plastics material in injection moulding, the upstanding walls at both sides of the front 55 axle being provided with generally wedge-shape slots larger at the rear end than at the forward end.

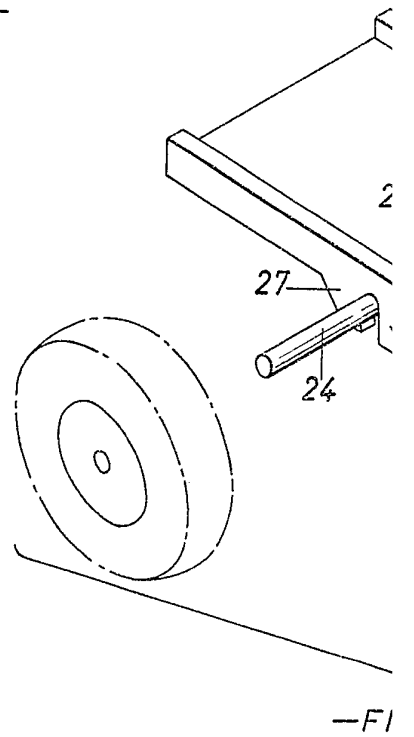
5. An improvement in or modification of the toy motor vehicle claimed in British Patent No. 891,681 constructed and arranged 60 substantially as herein described with reference to and as illustrated in Fig. 1 of the accompanying drawings.

6. An improvement in or modification of the toy motor vehicle claimed in British Patent No. 891,681 constructed and arranged 65 substantially as herein described with reference to and as illustrated in Figs. 2 and 2a of the accompanying drawings. 70

POLLAK, MERCER & TENCH.

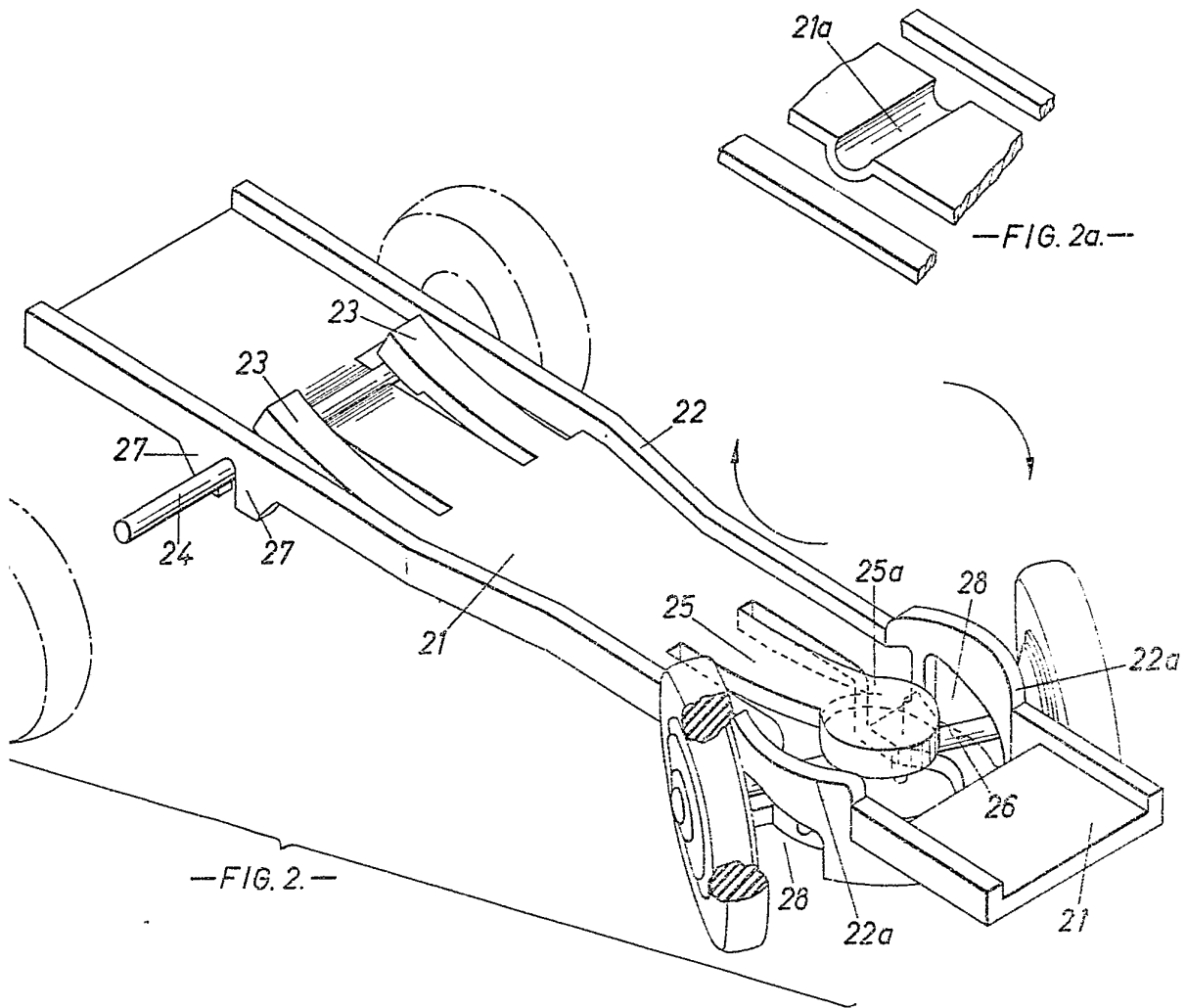


-FIG.1-



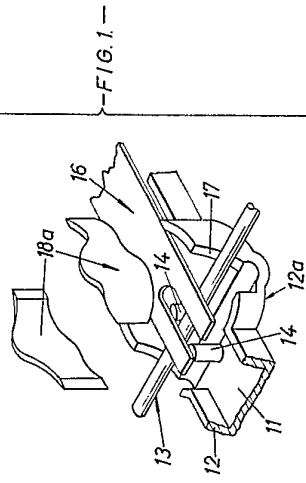
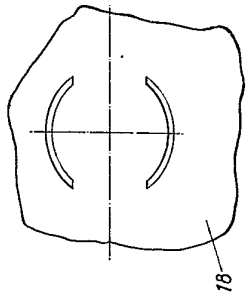
-F1

This drawing is a reproduction of the Original on a reduced scale.

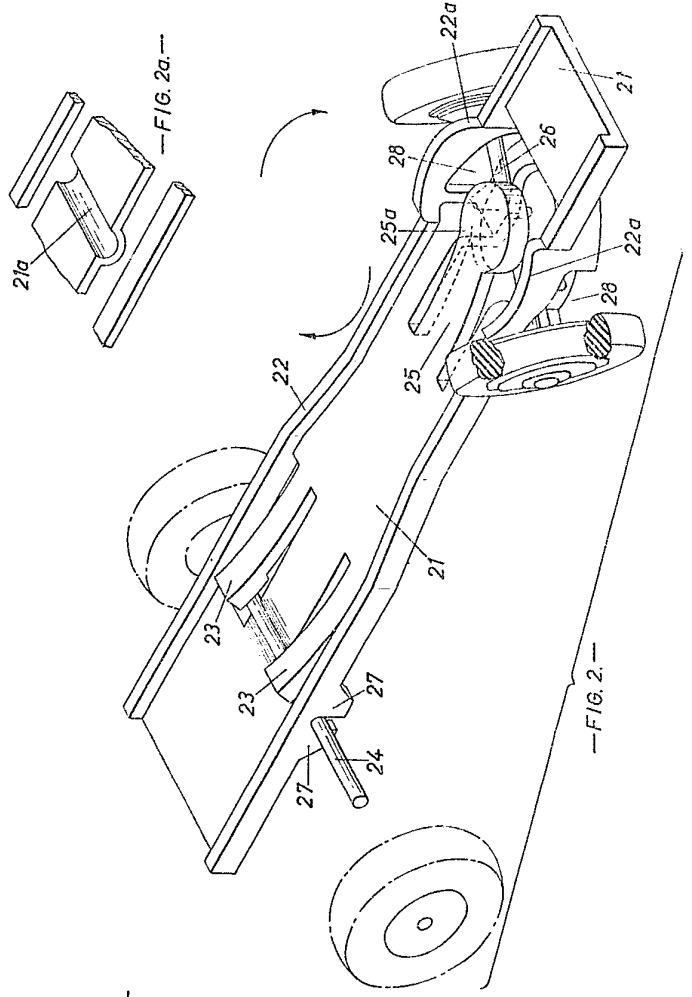


-FIG. 2.-

-FIG. 2a.-



—FIG. 1.—



—FIG. 2.—