June 12, 1956 R. BOTTLEMAN 2,749,662

TOY WHEEL VEHICLE

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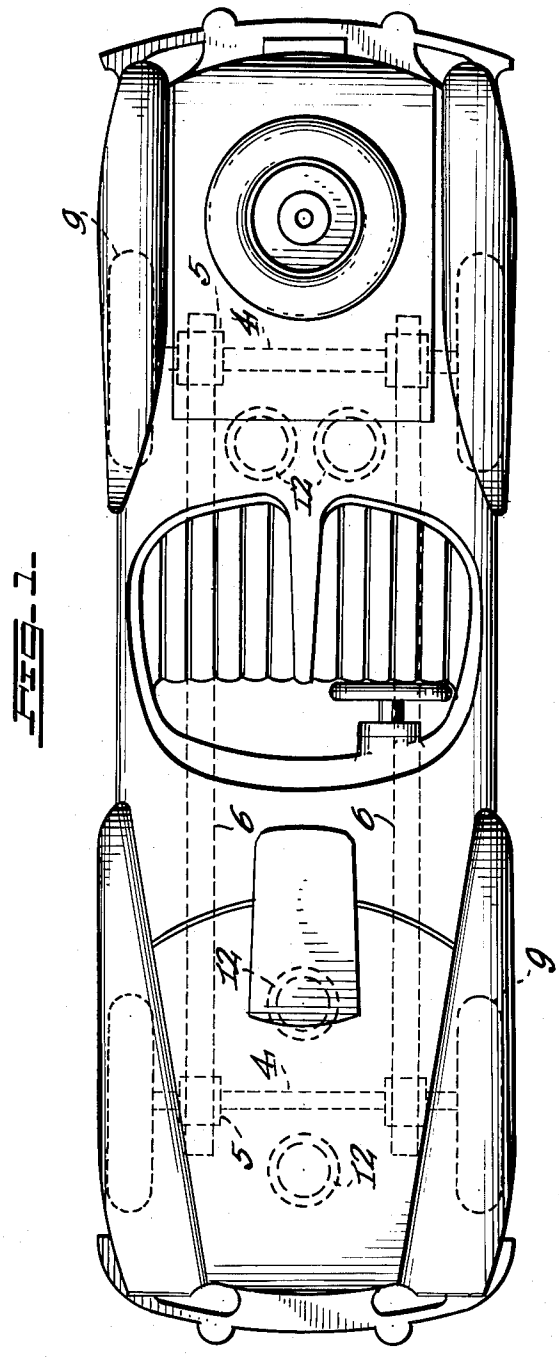


FIG. 1.

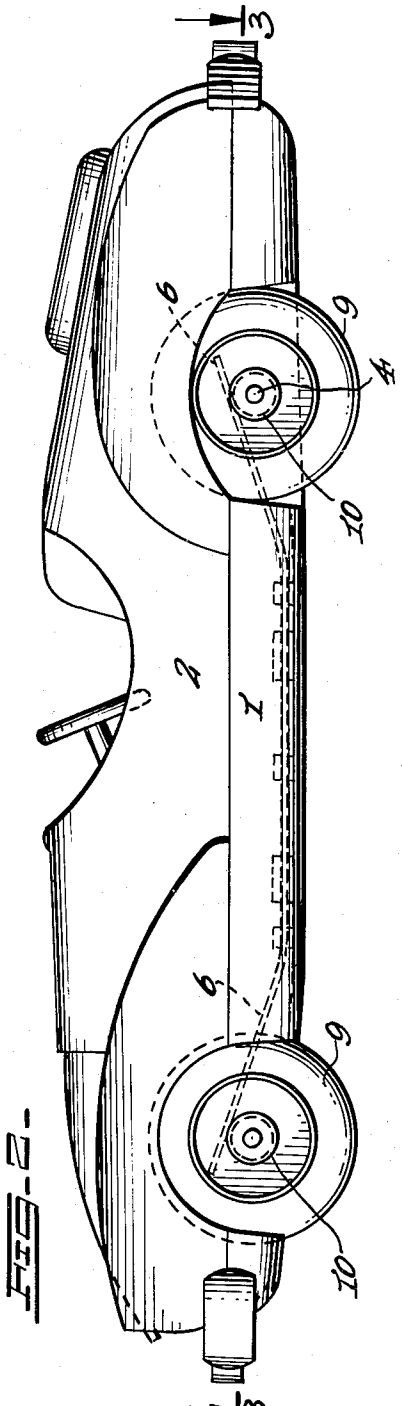


FIG. 2.

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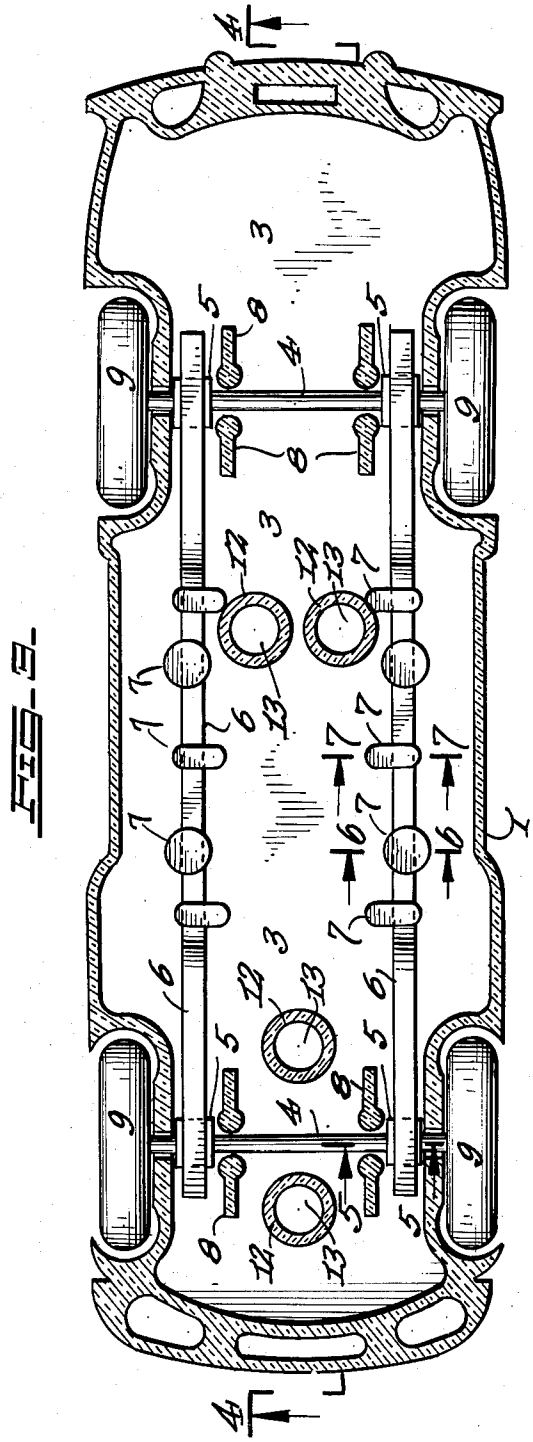


FIG. 3.

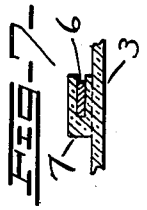


FIG. 7.

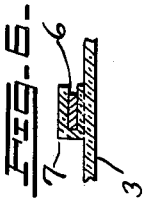


FIG. 5.

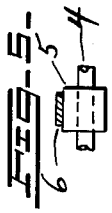


FIG. 5.

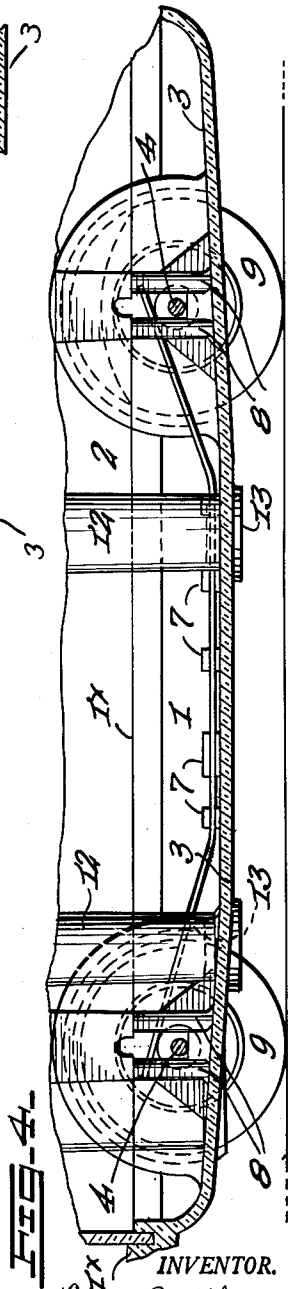


FIG. 4.

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TOY WHEEL VEHICLE

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Application October 30, 1953, Serial No. 389,388

1 Claim. (Cl. 46—223)

The object of the present invention is to provide a toy wheel vehicle, the example being a toy automobile, which can be molded of plastic in two halves, the lower half receiving two light metallic axles for the wheels, engaged by springs of special formation in such manner that the wheels and axles are floating and in addition the wheels may rotate on the axles.

The specific object of this invention is to provide a moldable article of the kind which may be produced by injection molding and which, in the combination of its two plastic sections, will be strong and very easily assembled.

The invention will be described with reference to the accompanying drawings in which:

Fig. 1 is a plan view of the device,

Fig. 2 is a side elevation,

Fig. 3 is a longitudinal section on the line 3—3, Fig. 2,

Fig. 4 is a fragmentary vertical section taken generally on the line 4—4, Fig. 3,

Fig. 5 is a detailed section on line 5—5, Fig. 3,

Fig. 6 is a detailed section on line 6—6, Fig. 3,

Fig. 7 is a detailed section on line 7—7, Fig. 3.

The lower half of the plastic construction will now be described. It consists of a boat-like plastic shell 1, the upper margin of which is best shown at 1x, Fig. 4, and the said margin is thickened and channeled to receive the upper body portion 2. Member 1 has a bottom wall 3 and its side walls at the areas for the wheels of the vehicle are inwardly recessed and formed with open slots to receive the metal shafts 4. The shafts 4 carry washers 5 which abut the adjacent side walls of member 1, and bearing upon these washers are two longitudinally positioned light strip springs 6. These springs, as shown in Figs. 3, 6 and 7 inclusive, are held by the horizontally slotted blocks 7 molded integrally with the bottom wall 3. Also at opposite sides of the shafts are positioned molded reinforcing stops 8.

The wheels 9 are rotatable on the axles and may be held against outward movement relatively to the axis by stop disks or eyelets 10 fixed to the axles.

The two springs 6 bear lightly upon the washers 5, the pressure only being such as to prevent any undue upward movement of the axis and wheels in the floating action thereon.

The upper half section 2 of the structure is a unitary member of plastic having a shape similar to that of an automobile sports car and depending from its upper wall are a plurality of plastic tubes 12 integral therewith. These tubes have a double function in that they add rigidity to the light gauge plastic structure 2 and serve to very strongly connect the two half sections 1 and 2. Each depending plastic tube 12 passes through an aperture in the bottom wall 3 of member 1 and a headed plug 13 is forced into the tube from the lower face of bottom wall 3 for connection and reinforcement of the two body sections 1 and 2. Ordinary friction will be sufficient for such connection, although the plugs may be threaded in the tubes or cemented within the tubes, if desired.

It will be understood that various modifications may be made in the form or the arrangement of the elements constituting the embodiment herein illustrated without departing from the spirit of the invention.

Having described my invention, what I claim and desire to secure by Letters Patent is as follows:

A molded toy sport car comprising a unitary molded bottom half section, a unitary molded top half section having a plurality of depending reinforcing hollow pillars adapted for engaging the said bottom section, a headed plug for each hollow pillar, said plug passing through the lower wall of the bottom half section and frictionally engaging the inner wall of an appropriate pillar, a front pair of upright spaced-apart axle confining abutments integrally molded to said bottom section, a rear pair of upright spaced-apart axle confining abutments integrally molded to said bottom section, a pair of leaf springs carried by the bottom section at the sides thereof, means securing intermediate areas of each spring to said bottom section and consisting of two rows of blocklike projections molded integrally with said bottom section and transversely slotted to receive said springs, a substantial front area and rear area of each spring being free and extending over the appropriate axle and exerting light pressure thereon, side walls of the bottom section having two pairs of vertical slots for receiving the axles and guiding the same independently of the said abutments.

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