Feb. 19, 1935. J. E. BRUBAKER 1,991,654

TOY

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Fig. 1.

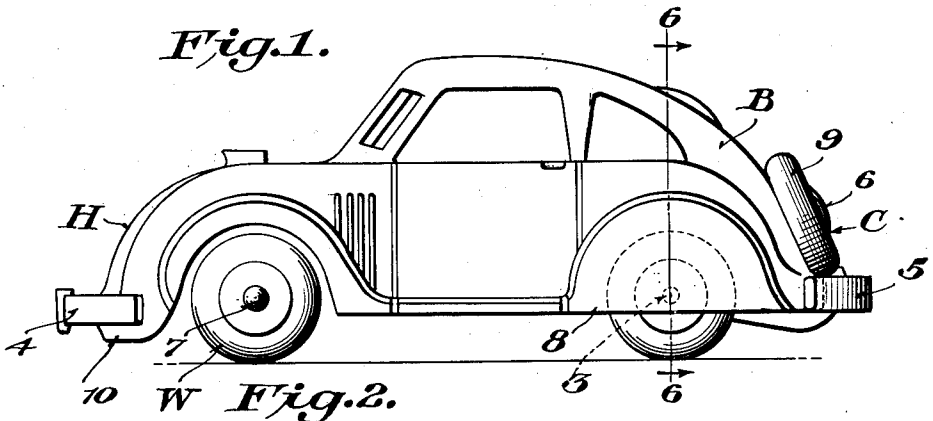


Fig. 2.

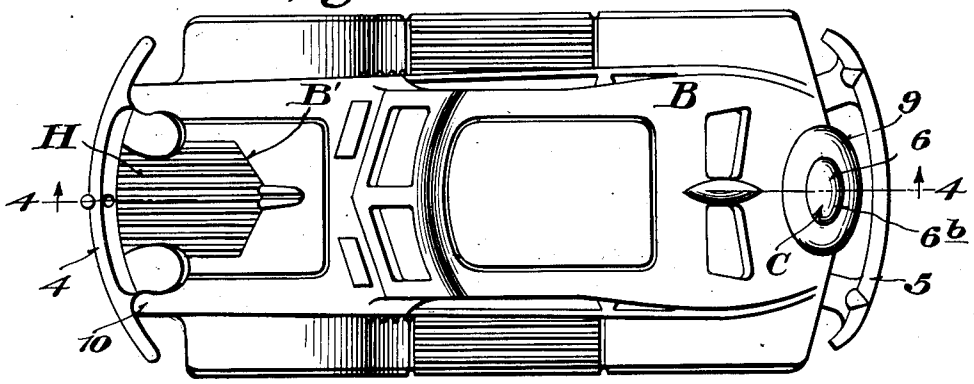
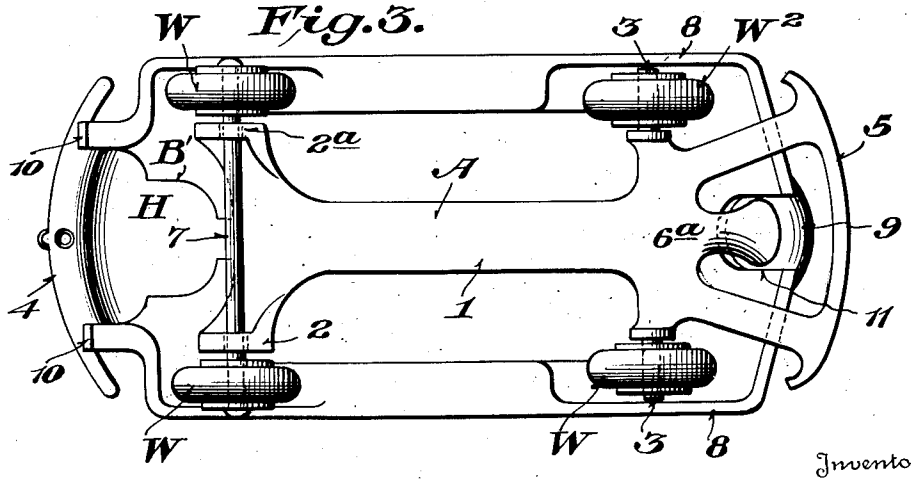


Fig. 3.



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Fig. 4.

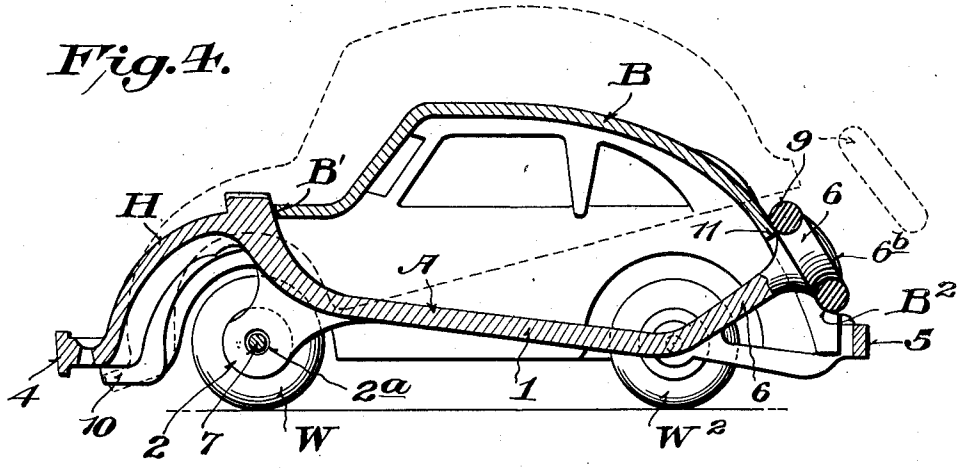


Fig. 5.

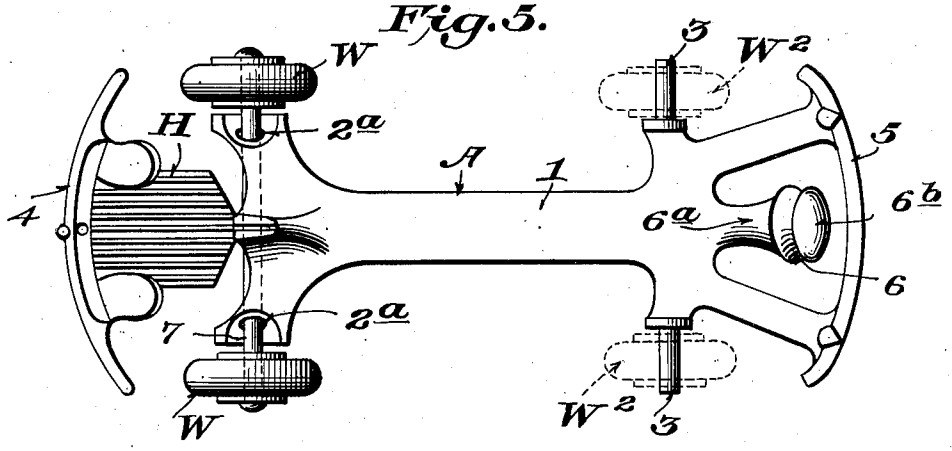


Fig. 6.

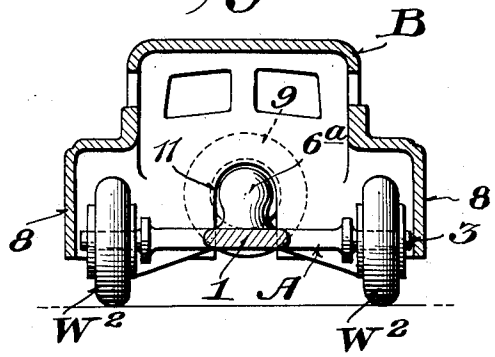
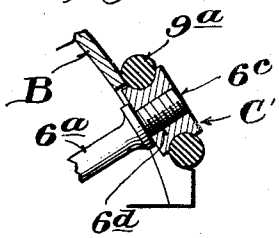


Fig. 7.



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UNITED STATES PATENT OFFICE

1,991,654

TOY

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Application May 31, 1934, Serial No. 728,439

15 Claims. (Cl. 46—48)

This invention relates to toys, and more particularly to a structure of the wheeled type intended to simulate a vehicle such as an automobile.

A primary object of the invention is to provide a toy consisting of a minimum number of parts, thereby not only facilitating manufacture, but at the same time permitting the user of the toy to readily take the same apart and reassemble the same so that where, as in the present instance, the toy simulates an automobile, bodies of different color may be assembled on the same chassis in a simple, expeditious, and safe manner without the use of tools or the like. Many toys of this type are difficult to take apart and reassemble without the use of a tool or instrument and some of them include parts which are likely to injure children in use.

A distinctive object of the invention is to provide a toy automobile essentially comprising chassis and body sections which are maintained in their interlocked relation by a member simulating a spare tire. That is to say, the chassis and body are formed with interfitting parts and may then be releasably locked together by a member located at the position of the spare tire or spare wheel at the rear of the toy.

Another object of the invention is to provide a construction which is particularly adapted to the making of cast toys, and which permits the front and rear bumpers being made integral with the chassis, thereby to enable the same to be readily nickel- or chromium-plated, while the body may be given a desired color treatment in the course of its manufacture.

A further object of the invention is to provide a chassis having axle portions for receiving the wheels and so forming the body with reference to the axles that portions of the body will serve to hold the wheels on the axles, thereby eliminating the necessity of special fastenings on or the riveting of the ends of the axles to hold the wheels thereon, and adding to the interest to the toy in the respect that the user may readily change wheels, if desired.

In its application to cast toys, the invention has special utility and manufacturing efficiency in the respect that the body and the chassis as well as the axles may be made in one piece, without the use of cores, thereby materially simplifying the basic manufacturing operation.

With the above and other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel features of construction, combination and arrangements of parts as will be hereinafter more fully described, illustrated in the accompanying drawings and defined in the appended claims.

A preferred and practical embodiment of the invention is shown in the accompanying drawings, in which:—

Figure 1 is a side elevation of the improved toy.

Figure 2 is a top plan view of the toy shown in Figure 1.

Figure 3 is a bottom plan view.

Figure 4 is a vertical longitudinal sectional view taken on the line 4—4 of Figure 2, with the manner of assembly indicated by dotted lines.

Figure 5 is a plan view of the chassis.

Figure 6 is a detail vertical sectional view taken on the line 6—6 of Figure 1.

Figure 7 is a detail view illustrating a modification of the spare tire or spare wheel mounting.

Similar reference characters designate corresponding parts throughout the several figures of the drawings.

Referring to the drawings, the chassis and body sections are respectively designated as A and B. These sections may be separately made for the purpose of facilitating manufacture and ornamental treatment and then suitably interlocked or interfitted and releasably held in assembled relation by the means C preferably simulating a spare tire or spare wheel.

Referring particularly to the chassis A, it will be observed that the same comprises a unit of spider-like formation including a body 1 having front and rear wheel supports respectively designated as 2 and 3 while the front end of the chassis is formed with a front bumper 5 and the rear is provided with the rear bumper simulating portion 5. According to the particular embodiment shown in the drawings, the chassis also includes a hood simulating section H, but so far as the essential features of the invention are concerned, it will of course, be apparent that the said hood section may be formed with the body.

The chassis A has several distinctive features of novelty, namely that it includes the wheel supports 2 and 3, the front and rear bumpers 4 and 5 respectively and a spare tire or spare wheel mounting device 6, the latter, as will presently appear more in detail, providing the means of holding the chassis and body in ultimate assembled relation.

The front wheel supports 2 may be provided with openings 2^a for receiving an axle pin 7 which carries the front wheels W. The ends of

the pins 7 may be upset or riveted to lock the wheels in place. The rear wheel supports 3, however, do not require special provisions for maintaining the wheels thereon in the sense that it is not necessary to rivet or upset the ends of the members 3 or to provide them with nuts or equivalent fastenings because it is intended that the body B will, when assembled on the chassis, serve to hold the wheels on the supports or axles 3. That is to say, the body is provided with fender aprons 8, or their equivalent, intended to overlie and mask the rear wheels for a portion of their diameter so that when the body is assembled on the chassis, the wheels will be held on the axles 3 by the body itself. This arrangement has manufacturing advantages in the respect that when the toy is cast, the axles may be cast with the chassis, and, when the wheels are assembled on the axles, the mere assembling of the body on the chassis will hold the wheels in position. While the present embodiment of the invention only proposes to use this type of rear mounting in connection with the rear axles W^2, it will of course, be apparent that it is within the teaching and scope of the invention to apply this feature to the front wheels also in event that it is desired to design the toy with aprons or masks for the front wheels.

The spare tire or spare wheel simulating member C preferably includes the mounting member 6 carried by a supporting section 6^a and whose outer surface 6^b may be rounded or curved, while the periphery or rim may be grooved thereby to receive an elastic annular member 9 simulating a spare tire. Thus, it will be apparent that the spare tire and the parts 6, 6^a, and 6^b constitute in effect the simulation of a spare wheel.

The body section B may be formed to simulate any desired style of body to be mounted on the chassis, and by reason of its relative separability, it is apparent that the same may be given any desired ornamental treatment during the course of its manufacture, and, although, in the present instance, the body is intended to simulate a modern streamline vehicle, it will, of course, be understood that the invention is readily adapted to bodies of other styles.

The said body section B is provided preferably in the front thereof with keeper means 10 intended to interlock with the chassis, thereby to permit of the body and chassis being readily held together at one point by the mere act of placing them together in proper assembled relation. Also, the front portion of the body may be provided with the recess B′ to receive the hood portion H of the chassis. The rear of the body is preferably provided with an opening or key slot 11 adapted to fit over and receive the member 6 constituting a part of the spare tire or spare wheel device, and is also formed as at B^2, to provide a keeper portion adapted for engagement by the spare tire or spare wheel. The opening or slot is made large enough to afford proper clearance of the member 6 in assembling the body and the chassis, and after these two parts are in final position, the spare tire simulating member 9 may be readily mounted on the support 6 thereby to releasably lock the body to the chassis.

From the foregoing it will be apparent that the chassis and body may be readily assembled in the manner heretofore generally set forth, and indicated in Fig. 4. Whenever it is desired to separate the parts, it is simply necessary to remove the elastic ring 9 simulating the spare tire and the body and chassis will readily come apart. Also, the wheels which have been held on the chassis by the body may be removed. The ring 9 is preferably made of rubber although it will be apparent that it is entirely within the scope of the invention, if desired, to make the member 9 of inelastic material and fasten it on the support 6 by any means well known in the art such as threading the inner circumference or by the use of cotter pins or other fastenings. Or, it may be made as shown in Figure 7 wherein the support 6^c itself is threaded as at 6^d to receive the internally threaded wheel simulating disk which carries the spare tire 9^a.

The construction described is particularly adapted to cast toys, but it is obviously within the scope of the invention to alter the construction sufficiently to adapt it to sheet metal or wrought iron toys, the distinctive feature being that of holding the body and chassis assembled by a spare tire or spare wheel device. It will also be apparent that other changes will be resorted to within the scope of the appended claims without departing from the invention.

I claim:—

1. A toy vehicle including a chassis and a body having means for interlocking engagement, and means simulating a spare tire unit for holding the body and chassis in assembled relation.

2. A toy vehicle including a chassis and a body having means for interlocking engagement, and elastic means simulating a spare tire for engaging a part of the chassis and the body to hold the same assembled.

3. A toy vehicle including a chassis, a body having means for interlocking engagement with the chassis and means carried by the chassis and simulating a spare tire for engaging a portion of the body to hold the same releasably interlocked.

4. A wheeled toy vehicle including a chassis formed with travelling wheel supports and a spare wheel support, a body detachably interlocked with the chassis, and means simulating a spare wheel adapted for mounting on said spare wheel support to lock the body and chassis together.

5. A toy wheeled vehicle including a chassis having front and rear bumper simulating portions, a spare tire support carried by the chassis, a body detachably interlocked with the front bumper simulating portion and having an opening for receiving said spare tire support, and an annular member fitted to said spare tire support for releasably locking the body and chassis together.

6. A wheeled toy including a chassis formed with travelling wheel supports and a spare time support and also formed with front and rear bumper portions, a body having means for detachably interlocking with the front bumper portion and having an opening for receiving said spare tire support, and a member simulating a spare tire fitted to said last mentioned support for engaging and holding the body and chassis interlocked.

7. A wheeled toy including a chassis having intermediate wheel supports and formed at its ends with bumper simulating portions, said chassis being also formed between the front bumper portion and the front wheel supports with a hood simulating section, a body having an opening for receiving said hood simulating section and provided with means for interlocking with the front bumper simulating portion, and means simulating a spare wheel adapted to be connected with the chassis and to hold the body assembled thereon.

8. A wheeled toy vehicle including a chassis having wheel supports, and a body mounted on the chassis and having portions masking the ends of said wheel supports to hold wheels thereon.

9. A wheeled toy vehicle including a chassis having integral axle portions formed therefrom, wheels mounted on the axles, and a body detachably interlocked with the chassis and having portions extending into the zone of the wheels carried by said axles to hold said wheels thereon.

10. A wheeled toy comprising a cast chassis section provided with integral cast main and spare wheel supports, a body having means for masking the main wheel supports and means for exposing the spare wheel support, and a member simulating a spare tire adapted to be fitted to said spare wheel support to hold the body and chassis together.

11. A wheeled toy comprising a chassis having a member projecting therefrom, a body mounted on the chassis, and means detachably fitted to said member projecting from the chassis for releasably engaging the body to lock the same on the chassis.

12. A wheeled toy comprising a chassis having a member projecting therefrom, a body mounted on the chassis, and elastic means simulating a spare tire detachably fitted to said member projecting from the chassis for releasably engaging the body to lock the same on the chassis.

13. A wheeled toy including a chassis, a body interlocked with the front of the chassis, and means at the rear of the interlocked chassis and body for holding the same in final assembled relation.

14. A wheeled toy including a chassis, a body interlocked with the front of the chassis, and means simulating a spare wheel unit located at the rear of the interlocked chassis and body for holding the same in final assembled relation.

15. A wheeled toy including a chassis, a body interlocked with the front of the chassis, and elastic means at the rear of the interlocked chassis and body and having a holding engagement with the chassis and an abutting engagement with the body to hold the chassis and body in assembled relation.

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