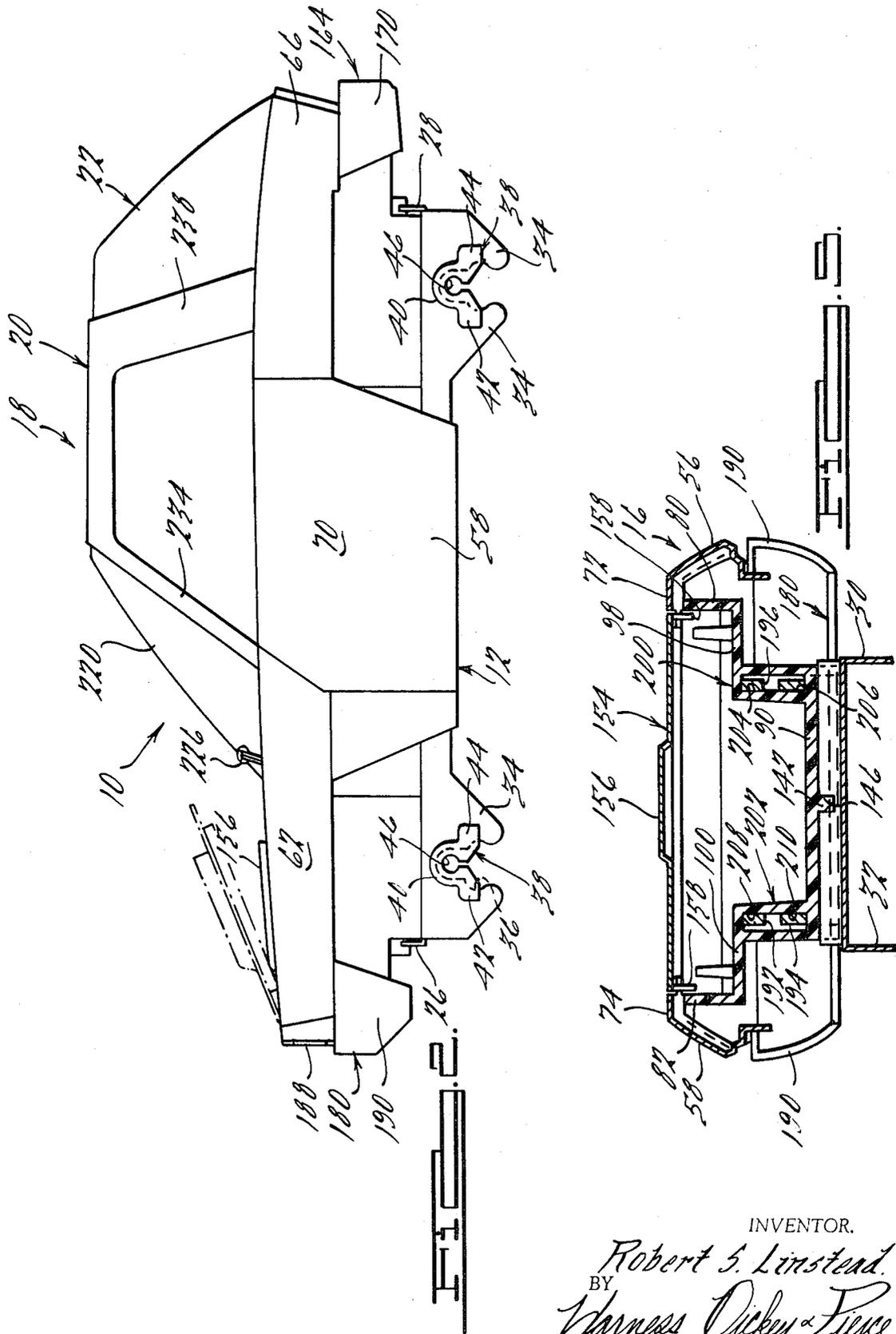
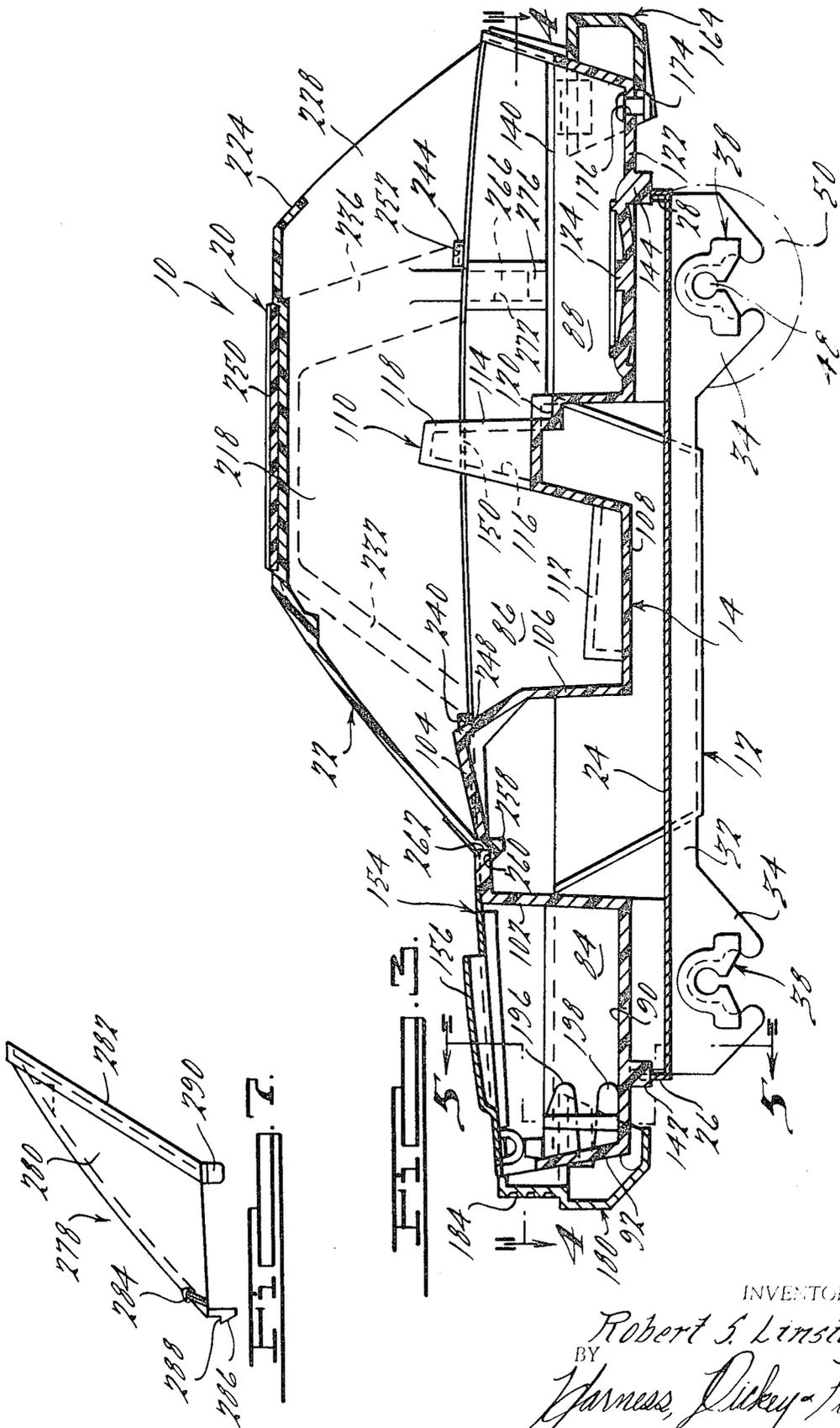


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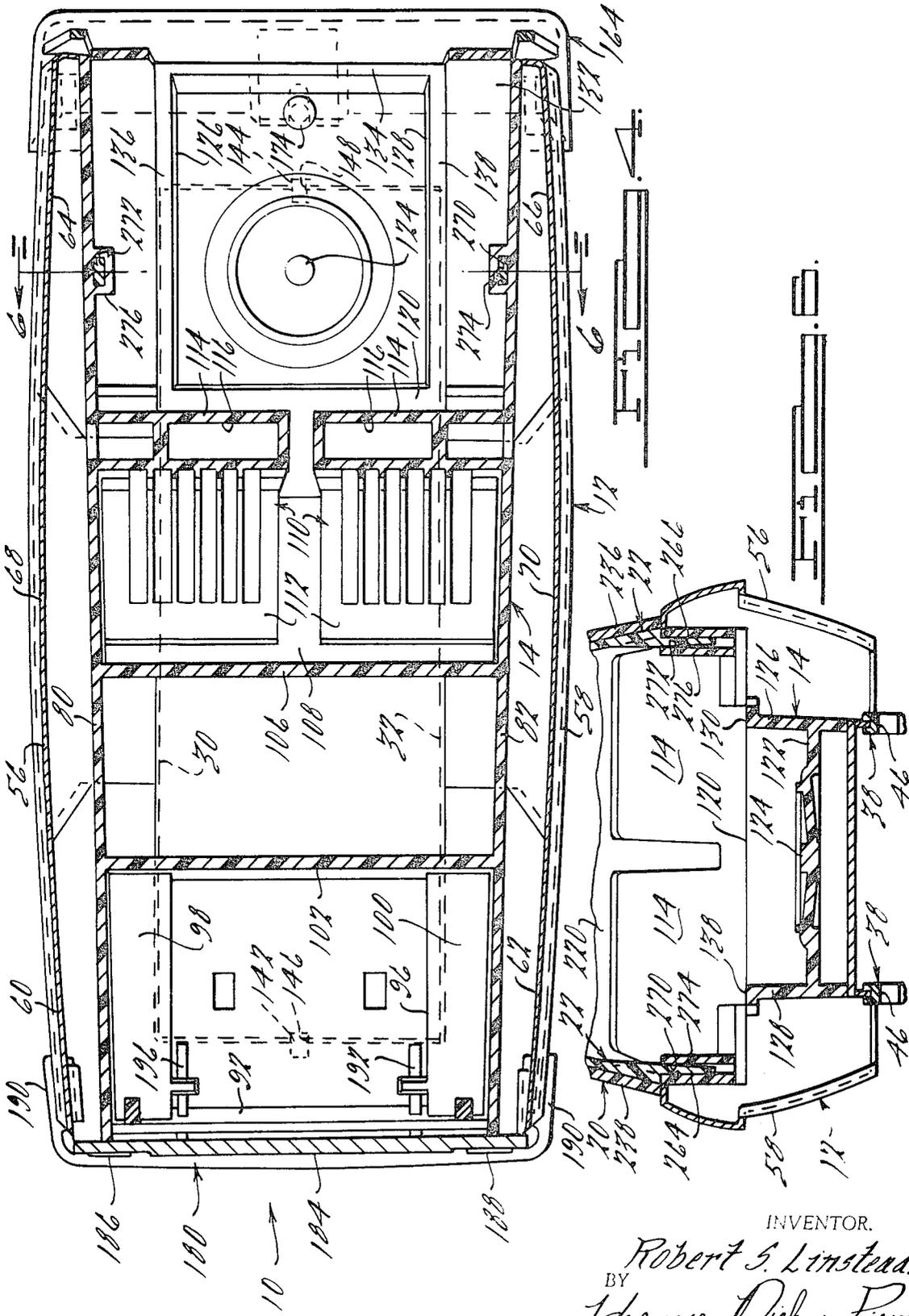


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TOY VEHICLE

BACKGROUND OF THE INVENTION

In the design and construction of toy vehicles, such as toy automobiles, trucks, and the like, it is imperative, at least from a manufacturing and marketing point of view, that such vehicles be adapted for assembly with a minimum amount of time and effort. It is, however, just as important in the design of such toy vehicles that the various component parts or subassemblies thereof be positively secured or connected together so as to minimize the possibility of disassembly or separation thereof when the vehicles are subjected to enthusiastic operation and manipulation by children. Another feature which is considered to be highly desirable in toy vehicles, and which render such vehicles extremely attractive as a toy resides in a construction wherein the child operator may make certain component changes in the vehicle and thus change or vary the exterior appearance thereof.

Generally speaking, the present invention is directed toward a new and improved toy vehicle which accomplishes the foregoing, as well as incorporating a number of additional features which make the vehicle attractive from both a manufacturing and marketing standpoint. More particularly, the toy vehicle of the present invention is characterized by a construction which facilitates extremely simple assembly, yet assures positive interconnection between the various component parts thereof. Moreover, the toy vehicle of the present invention is characterized by a construction which includes a top assembly, adapted to substantially enclose the operator compartment of the vehicle, and a windshield subassembly that may be mounted on the associated vehicle in lieu of the top assembly, or vice versa, by a simple manipulation of these components by a child operator, thereby permitting the child to change the appearance of the vehicle from a sedan or substantially enclosed vehicle, to an "open" vehicle or convertible.

SUMMARY OF THE INVENTION

This invention relates generally to toy vehicles, and more particularly, to a toy vehicle incorporating a novel design such that the vehicle can be substantially completed merely by assembling an exterior chassis member and an internal insert member.

It is accordingly a general object of the present invention to provide a new and improved toy vehicle.

It is a more particular object of the present invention to provide a new and improved toy vehicle which includes an elongated, generally U-shaped body member defining a longitudinally extending channel, and a seat insert member adapted to be received within the aforesaid channel and fixedly secured to the body member.

It is another object of the present invention to provide a new and improved toy vehicle featuring a top or roof construction and a windshield subassembly which may be interchanged with the roof construction so as to render the operator's compartment of the vehicle either substantially enclosed or open.

It is a further object of the present invention to provide a toy vehicle of the above character which includes a new and improved means for detachably securing the top and windshield subassemblies thereof to the associated body subassembly.

It is a related object of the present invention to provide a toy vehicle of the above-described type which includes fastening means for securing the top subassembly and windshield subassembly, and wherein the top subassembly is designed so as to conceal the fastening means for the windshield subassembly when the top subassembly is mounted on the associated body subassembly.

It is a further object of the present invention to provide a new and improved toy vehicle of the above character which includes a pivotably mounted hood member and which includes means functioning both as a securing means for the seat insert member within the body member and as a means for hingedly supporting the hood member thereon.

It is still another object of the present invention to provide a toy vehicle of the above type wherein the longitudinally extending channel defined by the body member is of a generally tapered configuration toward one longitudinal end of the vehicle, and wherein the seat insert member is generally complementary in shape to the channel.

It is another object of the present invention to provide a new and improved toy vehicle of the above type wherein the seat insert member and associated body member may be easily, yet positively, mounted.

It is still a further object of the present invention to provide a new and improved toy vehicle which is of a relatively simple design, is of a durable construction and economical to commercially manufacture.

Other objects and advantages of the present invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an exploded perspective view of the toy vehicle embodying the principles of the present invention;

FIG. 2 is a side elevational view of the toy vehicle illustrated in FIG. 1;

FIG. 3 is a longitudinal cross-sectional view of the toy vehicle illustrated in FIG. 2;

FIG. 4 is a horizontal cross-sectional view taken substantially along the line 4—4 of FIG. 3;

FIG. 5 is a transverse cross-sectional view taken substantially along the line 5—5 of FIG. 3;

FIG. 6 is a transverse cross-sectional view taken along the line 6—6 of FIG. 4, and

FIG. 7 is a side elevational view of a windshield structure which is adapted to be mounted on the toy vehicle of the present invention in lieu of the top member and window element shown in operative association therewith in FIGS. 1 through 3.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

For purposes of clarity, the terms "inner," "outer," and derivatives thereof will have reference to the geometric center of the toy vehicle of the present invention and the various component parts thereof. Similarly, the terms "forwardly," "rearwardly," and the like will have reference to the forward and rearward ends of the toy vehicle of the present invention, with the forward end thereof being located at the left side of FIG. 1 and the rearward end thereof being located at the right side of this Figure.

Referring now to FIGS. 1 and 2 of the drawings, a toy vehicle 10, in accordance with the preferred embodiment of the present invention, is shown as comprising an elongated longitudinally extending body member 12 and a longitudinally extending insert member, generally designated by the numeral 14, which is adapted to be mounted interiorly of the body member 12 and thereby constitute a body subassembly, generally designated by the numeral 16. The vehicle 10 also comprises a top subassembly, generally designated by the numeral 18, comprising a roof member 20 and a transparent window element 22 which are adapted to be secured together and thereafter be mounted upon the subassembly 16, as will hereinafter be described in detail.

Referring now in detail to the body member 12, as best seen in FIG. 1, the member 12 is preferably of a one-piece stamped sheet metal construction and comprises a generally flat, horizontally extending bottom section 24 which terminates at the forward end thereof in an upturned or vertically extending flange section 26 and at the rearward end thereof in an upturned vertically extending flange section 28. The laterally outer edges of the bottom section 24 extend downwardly and form longitudinally extending, spaced parallel frame portions 30 and 32. The forward and rearward ends of the frame portions 30, 32 are formed with downwardly extending axle-sup-

porting sections, generally designated by the numeral 34, which are arranged coplanar with the portions 32 and are each formed with an upwardly extending recessed portion 36. The recessed portions 36 are adapted to each receive and support one of a plurality of plastic axle keepers, generally designated by the numeral 38, which are preferably fabricated of a flexible resistant polyethylene or other suitable plastic material which is expandable and compressible within predetermined limits. The keepers 38 comprise generally U-shaped intermediate sections 40 and a pair of downwardly and outwardly extending leg sections 42 and 44. The intermediate sections 40 define generally cylindrical recesses 46 which are adapted to receive and rotatably support one end of one of a pair of longitudinally spaced, laterally extending axle members, generally designated 48, that extend laterally between the sections 34 of the body member 12. The laterally outer ends of the axles 48 project outwardly from the sections 34 and are adapted to have suitable rotatable wheels, representatively designated 50, mounted thereon. The keepers 38 are slotted around the outer periphery thereof and are thereby adapted to be inserted into the recessed portions 36 in a manner such that the peripheral slots nestingly receive the marginal edges of the recessed portions 36 to positively retain the keepers 38 in their respective operative positions. Although the keepers 38 may be of various constructions, they are preferably of one of the constructions shown and described in U.S. Pat. Nos. 3,389,495, 3,389,497, and 3,389,489, which are incorporated herein by reference as a descriptive portion of the applicant's specification.

The lower edges of the frame portions 30, 32 intermediate the sections 34, are formed with laterally outwardly projecting support portions 52 and 54, respectively, which in turn terminate at their laterally upper edges in generally arcuately shaped side sections 56 and 58, respectively, extending longitudinally along the entire length of the body member 12, as best seen in FIG. 1. The side sections 56, 58 comprise forwardly extending front fender portions 60, 62, rearwardly extending rear fender portions 64, 66 and intermediate portions 68, 70 which constitute simulated entrance doors for the vehicle 10. The upper edges of the side sections 56, 58 are formed with transversely inwardly extending shoulder portions 72, 74 which extend along the entire length of the side sections 56, 58 and define along the upper sides thereof a common support surface 76 upon which the top subassembly 18 is adapted to be mounted, in the manner later to be described. As best seen in FIGS. 5 and 6, the body member 12 is generally U-shaped in transverse cross section and defines a longitudinal extending channel, generally designated 78, which is coextensive of the side sections 56, 58 and is adapted to function in a manner hereinafter to be described in nestingly receiving the insert member 14.

Referring now in detail to the insert member 14, as best seen in FIG. 1, the member 14 is preferably of a one-piece molded plastic construction and comprises a pair of laterally spaced, longitudinally extending side sections 80 and 82 between which are located an engine compartment, generally designated 84, an operator and passenger compartment 86 and a trunk or luggage compartment 88. Disposed between the side sections 80, 82 and defining the lower side of the engine compartment 84 is a laterally extending, generally horizontally disposed bottom section 90 which terminates at its forwardmost edge in an upwardly extending forward flange section 92. The laterally outer edges of the bottom section 90 are formed with upwardly extending wall portions 94 and 96 which terminate at their upper edges in generally horizontally extending wall portions 98, 100, the wall portions 94, 96 and 98, 100 forming wheel housings within which the forwardmost pair of wheels 50 are partially received, as will be apparent. Disposed between and separating the engine compartment 84 and operator compartment 86 is a cowl structure comprising a generally vertically extending firewall section 102 which projects upwardly from the rearward end of the bottom section 90 and terminates at its upper end in a rearwardly and upwardly

inclined cowl 104. The rearward end of the cowl 104 is connected to a downwardly extending instrument panel or dashboard 106 upon which a suitable steering wheel (not shown) may be mounted.

As best illustrated in FIG. 3, the instrument panel 106 defines the forward end of the operator compartment 86 and terminates at its lower end in a generally horizontally extending bottom section 108. Disposed within the operator compartment 86 is a pair of seat members, generally designated 110, which comprises lower, generally horizontally extending base portions 112 and upwardly extending back portions 114, the seat member 110 preferably being formed integrally of the insert member 14 and defining internal cavities 116 within the upper ends of the back portions 114 thereof, for reasons later to be described.

The back portions 114 of the seat members 110 divide the operator and trunk compartments 86 and 88 and are formed with downwardly and rearwardly extending portions 118. The portions 118 are formed with a generally horizontally extending, laterally disposed shoulder 120 and terminate at their lowermost ends in a generally horizontally extending bottom section 122 that defines the lower side of the trunk compartment 88. If desired, the bottom section 122 may have a simulated spare tire 124 integrally molded in the upper side thereof, as best seen in FIGS. 3 and 4, whereby to enhance the realistic appearance of the vehicle 10. The bottom section 122 terminates at the laterally outer edges thereof in a pair of upwardly extending side portions 126 and 128 that in turn terminate at their upper edges in laterally outwardly extending portions 130 and 132, respectively, which form wheel housings for the rearward pair of wheels 50 of the vehicle 10, as will be apparent. The rearward end of the bottom section 122 terminates in an upwardly extending flange section 134 that projects between the confronting sides of the portions 126, 128. The upper end of the flange section 134 is vertically aligned with the shoulder 120 and with a pair of laterally inwardly extending shoulder portions 136 and 138 formed at the inner sides of the portions 126 and 128. The shoulder portion 120, upper edge of the flange 134 and shoulder portions 136, 138 are adapted to have mounted thereon a suitable cover member 140 which may be hingedly mounted at the forward end thereof by any suitable means (not shown) and be adapted to be pivotably biased about a transversely extending axis disposed, for example, immediately rearwardly of the seat back portions 114 between an open position providing access to the interior of the trunk compartment 88 and a horizontal closed position wherein the underside of the cover member 140 rests or bears upon the shoulder portions 120, 136 and 138 and the upper edge of the flange section 134.

In assembly of the toy vehicle 10 of the present invention the insert member 14 is adapted to be inserted longitudinally between the side sections 56, 58 of the body member 12 and thereby substantially fill the longitudinally extending channel 78 defined therebetween, with the result that substantially the entire vehicle may be completed by merely assembling the two members 12 and 14. As best illustrated in FIG. 4, in a preferred construction of the present invention, the side sections 56, 58 are tapered inwardly somewhat toward the forward end of the vehicle 10, whereby the lateral dimension of the channel 78 decreases toward the forward end thereof. Similarly, the side sections 80, 82 of the insert member are tapered somewhat inwardly toward the forward end of the member 14 in a manner such that in plan view, the channel 78 defined within the body member 12 and the insert member 14 are of a complementary configuration. By virtue of the tapered configuration of the channel 78 and insert member 14, the rearward end of the channel 78 is larger in the transverse dimension than the forward end thereof, with the result that the insert member 14, when assembled onto the member 12, must be inserted from the rearward end of the channel 78 toward the forward end thereof. When the members 12 and 14 are thus assembled, the member 14 is supported at the forward and rearward ends thereof at a position spaced upwardly

from the upper surface of the bottom section 24 by means of a pair of downwardly extending support blocks 142 and 144 which are attached to the lower side of the member 14 and adapted to be nestingly received within a pair of downwardly extending recessed portions 146 and 148 formed in the flange sections 26 and 28, respectively. Means for positively securing the insert member 14 within the confines of the body member 12 is provided in part by a pair of laterally inwardly projecting tabs 150 and 152 formed on the shoulder portions 72, 74. Upon insertion of the member 14 into the channel 78, the tabs 150, 152 are adapted to be inserted inwardly into the laterally outer sides of the seat back portion 114 and into the cavities 116 defined thereby. The shoulder portions 72, 74 overlie the upper edges of the side sections 80, 82 of the insert member 14 when the tabs 150, 152 are thus inserted into the cavities 116 through the laterally outer sides of the seat back portions 114 and thereby cooperate with the tabs 150, 152 in positively resisting relative longitudinal movement between the body member 12 and insert member 14.

The upper side of the engine compartment 84 is adapted to be closed by a generally planar hood member 154 which may be fabricated out of sheet metal and have a suitable simulated air scoop 156 or the like stamped therein. The forwardmost portions of the laterally outer edges of the hood member 154 are formed with a pair of downwardly extending boss portions, generally designated 158, which are formed with laterally directed openings or apertures 160. The lateral width of the hood member 154 is designed such that the member 154 may be received between the laterally innermost portions of the shoulder portions 72, 74 extending along the laterally outer edges of the engine compartment 84 when the insert member 14 is assembled within the body member 12. When the hood member 154 is thus oriented with respect to the subassembly comprising the body member 12 and insert member 14, the apertures 160 at the forward end of the member 154 are each adapted to receive one of a pair of laterally inwardly extending tabs 162 which are formed at the forward ends of the shoulder portions 72, 74, whereby to hingedly or pivotably connect the hood member 154 to the body member 12 for pivotable movement about a transversely extending axis extending through the tabs 162. It will be seen that with this construction, the hood member 154 is freely pivotable between the phantom line position shown in FIG. 2, which exposes the interior of the engine compartment 84, to a substantially closed position shown in FIGS. 2 and 3. It will be noted that when the hood member 154 is disposed in the closed position shown in FIG. 3, the rearward end thereof is adapted to bear upon the upper side of the cowl section 104. A particular feature of the above construction will be seen from the fact that the tabs 162 overlie the upper ends of the forwardmost portions of the side sections 80, 82 of the insert member 14, and thereby cooperate with the tabs 150, 152 in limiting relative longitudinal movement between the members 12 and 14. Hence, the tabs 162 serve the twofold function of supporting the hood member 154 and positively securing the insert member 14 in its assembled position within the body member 12.

The toy vehicle 10 of the present invention is provided with a rear bumper member, generally designated 164, that comprises a main transversely extending section 166 adapted to be positioned directly rearwardly of the flange section 134 of the insert member 14. The rear bumper 164 also comprises a pair of arcuately shaped forwardly projecting end sections 168, 170 that are adapted to partially embrace the rearward laterally outermost portions of the vehicle 10, as illustrated. The bumper section 166 is provided with a raised or elevated central portion 172 intermediate the opposite ends thereof, which portion 172 is disposed subjacent the bottom section 122 of the lower side of the luggage compartment 88. Means in the form of a suitable screw, bolt, rivet, or the like 174 is adapted to extend through a suitable opening 176 in the bottom section 122 and slot 178 in the flange section 172 for fixedly securing the rear bumper member 164 to the vehicle 10.

The forward end of the toy vehicle 10 is provided with a front bumper member, generally designated 180, comprising transversely extending bumper and grill sections 182, 184, respectively, and headlight-defining sections 188 and 186. The bumper section 182 is formed with rearwardly projecting end portions 190 adapted to partially embrace the forward end of the vehicle 10, as illustrated. The front bumper member 180 is adapted to be secured to the subassembly comprising the body member 12 and insert member 14 by means of two pair of vertically aligned, transversely spaced mounting fingers 192, 194 and 196, 198 which are integrally formed on the rearward side of the member 180 and are adapted to project longitudinally rearwardly therefrom through a pair of locking members 200 and 202 which are formed within the engine compartment 84 of the insert member 14 on the laterally inner sides of the portions 94 and 96, respectively, as best seen in FIGS. 1 and 5. The members 200, 202 define pairs of vertically spaced apertures 204, 206 and 208, 210, respectively, which are adapted to nestingly receive the rearward ends of the fingers 192-198 and thereby secure the bumper member 180 to the vehicle 10. As best seen in FIG. 1, the upper sides of the mounting fingers 192 and 196 are formed with generally vertically extending shoulders 212 and 214 which are adapted to hook behind the rearward sides of the locking members 200, 202 when the fingers 192, 196 are properly inserted through the openings 204 and 208, respectively. As seen in FIG. 3, the pairs of locking fingers 192, 194 and 196, 198 are tapered vertically away from one another toward the rearward end of the vehicle 10 and hence must be compressed somewhat in the vertical direction in order that they may be inserted through the respective openings in the locking members 200, 202. With this construction, the lower fingers 194 and 198 bear against the upper side of the bottom section 90 of the engine compartment 84 and are maintained under a slight state of compression so as to positively lockingly engage the shoulders 212 and 214 with the rearward sides of the members 200, 202.

Referring now in detail to the top subassembly 18 and in particular to the window element 22 thereof, as best seen in FIGS. 1 and 3, the element 22 consists of a pair of transversely spaced upright side sections 216 and 218 and a transversely extending upwardly and rearwardly inclined forward side section 220 which is connected at its opposite ends to the forward ends of the side sections 216, 218. The window element 22 further comprises a roof portion 222 which extends between the side sections 216, 218, and 220 and projects downwardly and rearwardly in the form of a small flange portion 224 between the rearward ends of the side sections 216, 218, as seen in FIG. 3. The roof portion 222 may be formed with a central opening (not shown) which effects a saving of material in the fabrication thereof, which opening would normally be closed upon assembly of the roof member 20 with the window element 22, as will later be described. The window element 22 is fabricated of a relatively transparent material, preferably styrene plastic or the like, and the forward side section 220 thereof may, if desired, have windshield wiper appearing embossments 226 molded adjacent the lower edge thereof to enhance the realistic appearance of the element 22, as will be apparent. The lower edge of element 22 preferably lies along a generally flat, horizontally extending plane, whereby when the element 22 is juxtapositioned upon the subassembly consisting of the body member 12 and insert member 14, the lower edge of the element 22 is contiguously engaged with the support surface 76. As best seen in FIG. 3, the side sections 216, 218, when the window element 22 is mounted upon the body member 12, extend rearwardly toward the rearward end of the vehicle 10, and the rearward ends of the side sections 216, 218, together with the portion 224, define an access opening 228 at the rearward end of the vehicle 10 through which a child may have access to effect opening and closing of the cover member 140.

The member 20 generally comprises a flat, horizontally extending roof portion 230 and has integrally formed thereon a

pair of downwardly depending forward support pillars 232, 234 and a pair of downwardly depending rearward support pillars 236 and 238. Generally speaking, the member 20 is adapted to be surmounted over the window element 22, with the forward pillars 232, 234 extending downwardly adjacent a laterally outer edge of the forward side section 220 and the rearward pillars 236, 238 extending downwardly along the side sections 216, 218 at positions intermediate the opposite ends of the sections 216, 218. As will be apparent, the forward and rearward pillars 232, 234 and 236, 238 are spaced longitudinally apart a sufficient distance so that the side sections 216, 218 of the element 22 will appear as opposed side windowpanes. Similarly, the forward pillars 232, 234 are spaced transversely apart so as to define with the window element 22 a windshield on the forward side of the element 22.

As best seen in FIG. 1, when the top member 20 is assembled or surmounted over the window element 22, the lower or free ends of the pillars 232, 234 and 236, 238 terminate adjacent the lower edge of the window element 22. The pillars 232-238 are provided with fastening means at the lower end thereof for fixedly securing the member 20 to the window element 22. In a preferred construction of the present invention, such fastening means is provided by means of pairs of laterally inwardly projecting locking tab portions 240, 242 and 244, 246 that are integrally formed on the lower ends of the pillars 232, 234 and 236, 238, respectively. Upon assembly of the top member 20 on the window element 22, the tab portions 240, 242 are adapted to be inserted within a pair of upwardly extending recesses 248, 250 formed in the side sections 216, 218 of the window element 22. Similarly, the tab portions 244, 246 are adapted to be received within a pair of upwardly extending recesses 252, 254 formed within the side sections 218 and 216 of the element 22. As illustrated, the recesses 252, 254 are spaced longitudinally rearwardly from the recesses 248, 250 and are in general longitudinal alignment with the lower ends of the support pillars 236, 238. In a preferred construction of the present invention, the pillars 232-238 are of a relatively flexible construction so that they may be resiliently biased to a position wherein the tab portions 240-246 may be inserted within their respective recesses 248-254. Upon assembly of the tab portions 240-246 within the recesses 248-254, the lower edges of said tab portions are arranged generally coplanar with the lower edge of the window element 22, whereby the lower edge of the assembly consisting of the top member 20 and window element 22 will be relatively smooth and be adapted to contiguously engage the support surface 76. It will be noted that the laterally inner ends of the tab portions 240, 242 and 244, 246 are formed with upwardly projecting shoulder portions, generally designated 256, which are adapted to snap into engagement with the laterally inner sides of the side sections 216, 218 of the window element 22, whereby to positively secure the top member 20 operatively engaged with the window element 22.

Referring now to the means for detachably securing the subassembly 18 to the body member 12 and insert member 14, as best illustrated in FIGS. 1 and 3, the forward side section 220 of the window element 22, at a position intermediate the laterally outer edges thereof, is formed with a downwardly extending hook-shaped fastening member, generally designated by the numeral 258. The member 258 is formed with a forwardly projecting shoulder portion 260 and is adapted to be received within a central opening 262 formed in the cowl section 104 in the insert member 14 upon assembly of the vehicle 10. Similarly, the window element 22 is formed with a pair of downwardly projecting tab members 264 and 266 that are integrally formed on the lower edges of the side sections 216, 218 of the element 22, respectively, at positions substantially aligned with the rearward pillars 236, 238. As will hereinafter be described, the tab members 264, 266 are adapted to be releasably received within a pair of vertically opening recesses 270, 272 defined by a pair of generally rectangular-shaped shroud members 274, 276 integrally formed along the laterally opposite sides of the luggage compartment 88.

In order to assemble the subassembly 18 consisting of the top member 20 and window element 22, initially, the subassembly 18 is positioned over the operator compartment 86 of the vehicle 10 and the forward end of the subassembly 18 is biased downwardly to a position wherein the hook member 258 may be inserted into the opening 262, with the shoulder 260 engaging the underside of the cowl portion 104. Thereafter, the entire rearward end of the subassembly 18 is biased downwardly such that the tab portions 264, 266 are inserted into the recesses 270, 272 and the lower edge of the window element 22 is contiguously engaged with the surface 76. It will be noted that the tab members 264, 266 are dimensioned so that they will frictionally engage the interiors of the recesses 270, 272, whereby the rearward end of the subassembly 18, upon being operatively mounted in the position shown in FIGS. 2 and 3, will be positively maintained in place. At such time if it is desired to remove the top subassembly 18, the rearward end thereof is biased upwardly from the surface 76 to disengage the tab portions 264, 266 from the recesses 270, 272, and thereafter, the hook member 258 is disengaged from within the opening 262. Due to the simplicity in the design of the top subassembly 18, assembly or disassembly of the same from the subassembly 16 may be accomplished by a relatively young child, without the possibility of damaging either of the subassemblies 16 or 18.

The toy vehicle 10 of the present invention is adapted to have a windshield member, generally designated by the numeral 278, mounted thereon in lieu of the top subassembly 18, and vice versa, at such time as it is desired to change the vehicle 10 into a convertible type vehicle, i.e., a vehicle without a top. The windshield member 278 will be seen in FIG. 7 as comprising a transparent windshield portion 280 which is adapted to extend transversely across the vehicle 10 in substantially the same position as the forward side section 220 of the window element 22. An enlarged thickness frame portion 282 is provided along the opposite sides of the windshield portion 280, as well as the top thereof, and if desired, suitable windshield wiper appearing embossments 284 may be integrally formed along the lower edge of the forward side thereof. The forward edge of the windshield member 278, at a position intermediate the opposite lateral ends thereof, is provided with a downwardly extending hook member 286 which is preferably identical in construction and operation to the hook member 258 provided on the window element 22. The hook member 286 is provided with a generally horizontally extending shoulder portion 288 which is adapted to engage the underside of the cowl section 104 of the insert member 14 when the hook member 286 is inserted into the opening 262 formed therein. The rearward lower edge of the windshield member 278 is provided with a pair of laterally spaced downwardly projecting tab members 290 which are adapted to be received within a pair of laterally spaced recess portions 292, 294 defined by the shoulder portions 74 and 72, respectively, of the body member 12 at a position spaced substantially longitudinally aligned with the upper end of the instrument panel section 106 of the insert member 14. The tab portions 290 are adapted to be received within the recesses 292, 294 in substantially the same manner as the tab portions 264, 266 are received within the recesses 270, 272, i.e., the tab portions 290 are adapted to be received within the recesses 292, 294 with a friction fit, whereby to positively maintain the windshield member 278 in its operative position upon the vehicle 10. In order to effect assembly of the windshield member 278, initially the hook member 286 thereof is inserted into the opening 262 on the cowl section 104, and thereafter, the rearward end of the member 278 is pivoted downwardly, whereby the tab portions 290 thereof are biased downwardly into frictional engagement with the recesses 292, 294.

A particular feature of the above-described construction, wherein the top subassembly 18 and windshield member 278 may be interchangeably mounted upon the vehicle 10, resides in the fact that when the top subassembly 18 is mounted on

the subassembly 16, the forward support pillars 232, 234 almost entirely conceal the recesses 292, 294 in the body member 12, whereby to enhance the external appearance of the vehicle 10 and prevent any dirt or other foreign materials from accumulating within the recesses 292, 294 during such time as the windshield member 278 is not being used. A further feature of the above-described construction will be seen from the fact that the windshield member 278 and top subassembly 18 may be easily removed and interchanged when desired by a simple manipulation thereof by the child or other person operating the vehicle 10.

It will be seen from the above description that the present invention provides a new and improved toy vehicle which is of an extremely simple design and hence may be easily assembled and economically manufactured. More particularly, the particular design of the body member 12, wherein the longitudinally extending channel 78 is formed for easy acceptance of the insert member 14, provides for a minimum amount of assembly time and effort. Moreover, virtually the entire vehicle may be assembled by merely interconnecting or mounting the insert member 14 within the body member 12. A further feature of the present invention is the provision of the conveniently interchangeable top subassembly 18 and windshield member 278 which provides for convenient adaptation of the vehicle 10 as a substantially closed sedan or hardtop to a convertible, thereby providing for variety in appearance and operation of the vehicle 10. Still another feature of the present invention will be seen from the fact that the pivotably mounted hood member 154 thereof is designed to be hingedly mounted on the vehicle by means of the same tab members (162) which function also to positively secure the insert member 14 within the body member 12. Moreover, the vehicle 10 of the present invention will be seen to be of an extremely durable construction and will therefore have a long and effective operational life.

While it will be apparent that the embodiments illustrated herein are well calculated to fulfill the objects above stated, it will be appreciated that the toy vehicle 10 of the present invention is susceptible to modification, variation and change without departing from the proper scope or fair meaning of the subjoined claims.

I claim:

1. In a toy vehicle,
 - a first body member defining laterally spaced side sections and a substantially unobstructed area extending longitudinally for the entire length thereof,
 - a second body member adapted to be inserted longitudinally into said area and being movable longitudinally therein to a position wherein a motor compartment defined thereby is in general longitudinal alignment with the forward end of said first body member, a hood member disposed in general longitudinal alignment with said motor compartment, and
 - means for fixedly securing said first and said second body members together and movably supporting said hood member for pivotable movement between positions opening and closing said motor compartment.
2. A toy vehicle as defined in claim 1 which includes tab means extending laterally between one of said body members and the adjacent lateral edges of said hood member for movably supporting said hood member.
3. A toy vehicle as defined in claim No. 2, which includes means on the laterally outer edges of said hood member movably engageable with said tab means.
4. A toy vehicle as defined in claim 1, which includes a pair of downwardly extending flanges formed one on each side of said hood member and means on said first body member movably engaging said flanges for hingedly supporting said hood member for movement between positions opening and closing said motor compartment.
5. In a toy vehicle,
 - a first member defining generally laterally spaced pairs of front and rear fenders and passenger doors and an elongated substantially unobstructed channel extending longitudinally for the entire length of said first member,

said first member including a generally horizontally disposed longitudinally extending intermediate portion and a pair of integral laterally spaced vertically upwardly extending side portions defining said channel therebetween, and

a second member defining a motor compartment, a passenger compartment, and a luggage compartment, said second member adapted for longitudinal insertion into said channel from one end thereof and being movable longitudinally along said channel to a preselected position wherein said motor compartment, said passenger compartment and said luggage compartment are longitudinally aligned with said front fenders, said passenger doors and said rear fenders, respectively.

6. A toy vehicle as defined in claim 5, wherein said second member is fabricated of a one-piece molded-plastic construction.

7. A toy vehicle as defined in claim 5 wherein said first member is a one-piece stamped-metal construction.

8. A toy vehicle as defined in claim 5 wherein said channel and said second member are of generally complementary configuration in horizontal cross section.

9. A toy vehicle as defined in claim 8 wherein said channel and said second member are generally tapered inwardly toward the forward end of said vehicle.

10. A toy vehicle as defined in claim 5 which includes means extending laterally of said first and second members for securing said second member within said channel.

11. A toy vehicle as defined in claim 10 wherein said means extending laterally of said members for securing said second member within said channel is integrally connected to one of said members.

12. A toy vehicle as defined in claim 5 wherein said first member is of a one-piece stamped-metal construction, wherein said second member is of a one-piece molded-plastic construction, wherein said channel and said second member are tapered inwardly toward the forward end of said vehicle, and which includes tab means extending laterally inwardly from the sides of said first member over the upper edges of said second member for securing said second member within said channel of said first member.

13. In a toy vehicle,

a first body member comprising a lower base section and a pair of laterally spaced upstanding side sections defining a substantially unobstructed area extending longitudinally for the entire length of said first body member,

a second body member of substantially the same size and shape as said area and adapted to be inserted into one end of said area and be moved longitudinally therein to a preselected longitudinal position in alignment with said first body member, and

means for securing said first and second body members against relative movement therebetween.

14. A toy vehicle as defined in claim 13 wherein said means for securing said first and second body members against relative movement therebetween comprises laterally extending tab portions projecting between said first and second members.

15. A toy vehicle as defined in claim 14 wherein said tab members are integrally formed on said first member and extending laterally inwardly therefrom into engagement with said second member.

16. A toy vehicle as defined in claim 13 wherein said area and said second body member are generally tapered inwardly toward the forward end of said vehicle.

17. A toy vehicle as defined in claim 13 which includes at least one bumper member extending laterally of the vehicle and means for securing said member to the vehicle, said bumper-securing means comprising means extending longitudinally of the vehicle and frictionally engaged therewith.

18. A toy vehicle as defined in claim 17 wherein said bumper-securing means comprises finger means extending longitudinally of said bumper member and means on the vehicle adapted for frictional engagement with said finger means.

19. A toy vehicle as defined in claim 13 wherein said second body member defines a motor compartment at the forward end of the vehicle, which includes a hood member disposed in longitudinal alignment with said motor compartment, and means for fixedly securing said first and second body members together and movably supporting said hood member for total movement between positions opening and closing said motor compartment.

20. A toy vehicle comprising, a generally U-shaped body member including a lower base section and laterally spaced upstanding side sections providing front and rear fenders and an access door along each side of the vehicle, and an insert member having a lateral dimension approximately equal to the lateral spacing between said side sections and a longitudinal dimension approximately equal to the length of said body member, said insert member comprising laterally spaced, longitudinally extending side portions defining in part an engine compartment, an operator compartment and a luggage compartment interiorly of said body member.

21. A toy vehicle as defined in claim 20 wherein said body member and said insert member define a generally horizontally extending support surface and first, second and third mounting means, which includes a top subassembly including means defining opposite side windows, a windshield, a roof portion and means cooperable with said first and third mounting means for securing said top subassembly to said vehicle, and which includes a windshield subassembly including a generally transversely extending transparent portion and fastening means cooperable with said first and second mounting means for securing said windshield subassembly to the vehicle, said windshield subassembly being adapted to be mounted on said support surface in lieu of said top subassembly and vice versa.

22. A toy vehicle as defined in claim 20 which includes a one-piece window element fabricated of a relatively transparent material and including transversely spaced upright side portions providing opposed side windowpanes and a front portion providing a windshield, which further includes a top member including a roof overlying said window element and having front and rear pairs of pillars depending downwardly adjacent the laterally outer side of said window element and means on the lower ends of said pillars engageable with said window element for securing said top member thereto and means on the lower side of said window element cooperable with said body member and said insert member for securing said window element and said top member thereto.

23. A toy vehicle as defined in claim 20 which includes a hood member disposed in general longitudinal alignment with said engine compartment, and which includes means for fixedly securing said insert member within said body member and movably supporting said hood member for pivotable movement between positions opening and closing said engine compartment.

24. A toy vehicle as defined in claim 20 wherein said body member defines a longitudinally extending channel, and wherein said insert member and said channel are generally tapered inwardly toward the forward end of said vehicle, whereby said insert member must be inserted into said channel from the rearward end thereof.

25. A toy vehicle as defined in claim 20 wherein said insert member defines simulated seat members disposed within said operator compartment, which includes tab means integrally formed on said side sections of said body member and extending laterally inwardly therefrom, said tab members being en-

gageable with said seat members for securing said insert member within said body member against relative movement therebetween.

26. In a toy vehicle, a body assembly including means defining a centrally disposed forward fastening means and a pair of transversely spaced and aligned fastening means located rearwardly of said first-mentioned fastening means, a one-piece window element fabricated of a relatively transparent material and including transversely spaced upright side portions providing opposed side windowpanes and a front portion providing a windshield, a top member including a roof overlying said element and having front and rear pairs of pillars depending downwardly adjacent the laterally outer sides of said element, means including laterally inwardly projecting tab means adapted to underlie the lower edge of said window element for securing said top member thereto, and means on the lower side of said window element cooperable with said fastening means on said body assembly for securing said window element and said top member thereto.

27. In a toy vehicle, a first body member defining laterally spaced side sections and a longitudinally extending channel therebetween, a second body member comprising upwardly extending longitudinally disposed and laterally spaced side sections adapted for insertion within said channel and defining a motor compartment in general longitudinal alignment with the forward end of said first body member, a hood member disposed in general longitudinal alignment with said motor compartment, and means including tab means extending laterally inwardly from said first body member over said side sections of said second body member for fixedly securing said first and said second body members together and movably supporting said hood member for pivotable movement between positions opening and closing said motor compartment.

28. In a toy vehicle, a first body member defining laterally spaced side sections and a longitudinally extending channel therebetween, a second body member adapted for insertion within said channel and defining a motor compartment in general longitudinal alignment with the forward end of said first body member, a hood member disposed in general longitudinal alignment with said motor compartment, said hood member having a pair of downwardly extending flanges defining laterally aligned openings thereof, means for fixedly securing said first and said second body members together and movably supporting said hood member for pivotable movement between positions opening and closing said motor compartment, said last-mentioned means including tab means extending laterally inwardly from said first body member and projecting through said openings for hingedly supporting said hood member on said first and second body members.

29. In a toy vehicle, a first body member comprising a lower base section and a pair of laterally spaced upstanding side sections defining a longitudinally extending channel therebetween, a second body member fabricated of a one-piece molded-plastic material and being of substantially the same size and shape as said channel and adapted to be received therewithin, said second member having simulated operator seats, and means engageable with said simulated seats for securing said first and second body members against relative movement therebetween.

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,629,968 Dated December 28, 1971

Inventor(s) Robert S. Linstead

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 3, line 27, "3,389,489" should read
-- 3,389,498 --.

Signed and sealed this 31st day of October 1972.

(SEAL)
Attest:

EDWARD M. FLETCHER, JR.
Attesting Officer

ROBERT GOTTSCHALK
Commissioner of Patents