This invention relates to a bracket for attaching a toy to a child's chair. The toy for which the bracket serves as a mounting means is here shown to constitute a platform on which are provided a variety of manipulative elements serving to simulate components used or observed by the driver of an automobile. However, the toy is merely exemplificative and the invention accordingly is not restricted thereto except for the fact that the toy must, pursuant to the instant invention, include a top panel and at least two opposed side flanges. The bracket is firmly coupled to the toy and enables the toy to quickly and easily be manually detachably secured to a child's chair such as a stroller, feeding chair, high chair, car seat or the like.

A principal object of the present invention is to provide a bracket of the character described which can be readily and inexpensively mass-produced.

It is another object of the present invention to provide a bracket of the character described which is simple to couple to a toy.

It is another object of the present invention to provide a brackets of the character described which can easily and conveniently be manually detachably secured to a child's stroller, feeding chair, high chair, car seat or similar object.

It is another object of the present invention to provide a bracket of the character described which can be coupled to a toy in various manners and which can be secured to different kinds, shapes and sizes of chairs.

Other objects of the present invention in part will be obvious and in part will be pointed out hereinafter.

The present invention accordingly consists in the features of construction, combinations of elements and arrangements of parts which will be exemplified in the toy and bracket hereinafter described and of which the scope of application will be indicated in the appended claims.

In the accompanying drawings, in which is shown one of the various possible embodiments of the present invention,

FIG. 1 is a perspective view of a toy coupled in one of two possible fashions to a bracket embodying the present invention, the latter being shown secured in one of various modes to a stroller;

FIG. 2 is an enlarged fragmentary side view of the toy and bracket shown in FIG. 1;

FIGS. 3 and 4 are enlarged sectional views taken substantially along the lines 3-3 and 4-4, respectively, of FIG. 2;

FIG. 5 is a side view of the toy showing the same mounted on a feeding chair tray and illustrating a different mode of using the bracket; and

FIG. 6 is a perspective view of the bracket.

Referring now in detail to the drawings, the reference numeral 10 denotes a toy to which there is coupled a bracket constructed in accordance with the present invention. Said toy comprises a platform 12 fabricated, for example, from a strong and slightly resilient plastic such as a high impact resin, e.g. a butadiene-styrene resin. The platform has a peripheral flange that includes side walls 14, a front wall 16 and a rear wall 18, all integral with and perpendicular to a rectangular top panel 20 (see FIGS. 1 and 2). The front wall 16 is much deeper than the rear wall 18 so that the panel slopes rearwardly and downwardly when the platform is placed on a horizontal surface.

The panel 20 is provided with a variety of elements so as to simulate an automobile dashboard. Thus, a rotatable steering wheel 22 is disposed centrally on the panel in front of a pseudo-speedometer dial 23. A rear view mirror 24 projects above the front of the panel. A manually manipulable element 26 that operates a concealed cicker simulates a gear shift and is oscillatibly mounted to one side of the steering wheel. A gas tank cap 28 is screwed on the panel, and a glove compartment 30 is provided therein. The steering wheel is provided with a horn button 32 which operates a conventional air actuated noise-maker. The glove compartment includes a sliding door (not shown) that can be manually closed against a spring that urges the door to open position, the door being latched in closed position. A quick release button 34 and a delay release button 36 are provided to selectively cancel the latch and open the glove compartment, whereby to lend variety to the toy.

A bracket 38 embodying the invention is formed from spring steel wire to a shape, best seen in FIG. 6, that includes two spaced terminal hooks 39. The construction of the hooks will be described in detail hereinafter and is such as to permit easy attachment of the bracket to a greatest variety of children's chairs.

The bracket includes a long reach 40 at each end of which a short reach 42 is provided. The reaches 42 extend in the same direction and converge at a slight angle, e.g. 15°, towards one another. Each short reach includes a centrally disposed U-bend 44; said bends project outwardly, i.e., away from one another. The long reach 40 includes a U-bend 46 projecting in a direction opposite to that in which the short reaches extend. All three U-bends and all three reaches lie in the same plane which for convenience will be referred to as a horizontal plane.

The short reaches are integral at the ends thereof remote from the long reach with the terminal hooks 39. The hooks include short offsetting arms 48 integral with said remote ends of the short reaches, at right angles to the short reaches and disposed in a vertical plane perpendicular to the horizontal plane of the said reaches. The offsetting arms in turn are integral at the ends thereof remote from the short reaches with perpendicular extensions 50 which are disposed in a horizontal plane parallel to that of the short reaches and in substantially the same vertical plane as that of the short reaches and the offsetting arms 48. Viewed in plan (see FIG. 3) the extensions appear to be colinear with the short reaches. The extensions are integral at the ends thereof remote from the arms with oppositely and outwardly projecting elements 52 disposed at right angles to the extensions and in the horizontal plane thereof. The elements 52 are integral at their outer ends with legs 54 which extend forwardly in vertical planes approximately parallel to those of the short reaches. Said legs are directed downwardly at an angle of about 45° with respect to the horizontal plane of the short reaches. The ends of the legs 54 remote from the elements 52 are bent inwardly to form short integral facing fingers 56 on the free ends of which plastic caps 58 are secured. The arms 48, extensions 50, elements 52 and legs 54 are of about the same length which is considerably shorter than that of the short reaches, and the fingers are still shorter. Said arms, extensions, elements, legs and fingers comprise the terminal hooks 39.
The side walls 14 and front wall 16 of the platform are provided with coplanar elongated slots 47 parallel to the top panel 20 and adapted to closely receive the bends 44 and 46 of the bracket 38. More specifically, the wire is disposed inside the platform with the U-bend of the long reach 40 received in and projecting out of the slot 47 in the front wall 16 and with the U-bends 44 of the short reaches 42 received in and projecting out of the slots 47 in the side walls 14. The reaches are parallel to the top panel when the bracket is secured in the platform. The bracket is of such size and shape that the long reach 40 is held by the U-bends 44 and the short reaches 42 immediately adjacent the inner surface of the front wall 16 of the platform while the short reaches flare slightly from the inner surface of the side walls 14 of the platform due to the convergence of the short reaches. The U-bends 44 of the short reaches are disposed slightly farther forward with respect to base of the U-bend 46 of the long reach than the slots 47 in the side walls 14 of the platform are disposed with respect to the slot 47 in the front 16 of the platform. As a result, in order to locate all three U-bends in their respective associated slots, it is necessary to first insert the U-bend 46 in its slot and one of the U-bends 44 in its slot, and then force the other U-bend into its slot by flexing the short reach whereby it is located inwardly; i.e. towards the other short reach. The force returning the short reaches to their normal orientation causes all three U-bends to be tightly held in their associated slots. The foregoing is facilitated by a slight forward bow in the long reach.

The short reaches 42 are of such length that with the bracket 38 disposed in the platform 12 as just described the terminal hooks 39 are located behind the rear wall 18 of the platform (see FIG. 2). The offsetting arms 48 extend parallel to the rear wall 18 and toward and perpendicular to the plane of the top panel 20. The extensions 50 extend rearwardly, the elements 52 extend outwardly, the legs 54 extend downwardly (assuming the top panel 20 to be horizontal) and the fingers 56 extend inwardly. All of the foregoing is apparent from FIGS. 1 and 2.

The manner in which the attaching bracket is used depends on the type of child's chair to which the toy is to be attached. With car seats, strollers and the like the bracket is hooked to the U-shaped retainer bar thereof, while in the case of feeding chairs and similar objects, the bracket is hooked to the rim or overhang of the tray thereof. Strollers, car seats and like chairs usually include a U-shaped retainer bar extending from the rear of the chair to the front and across the foot so as to surround the child's feet. As shown in FIG. 1, this bar includes two side pieces 60 integral with and parallel to a front cross-piece 62. The terminal hooks 39 of the attaching bracket 38 cooperate with the right angle bends 64 (see FIG. 3) between the cross piece and side pieces in effecting the attachment. It is to be noted, however, that it is not essential that these bends be 90° bends, and the attaching bracket will also operate properly with acute angle bends and obtuse angle bends.

The platform is secured to the U-shaped retainer bar of a chair such as a stroller by engaging the terminal hooks 39 with the bends 64. To do this the short reaches are temporarily squeezed a few inches towards one another so that after one hook is engaged with a bend 64 the other hook can be engaged with the other bend 64. The orientation of the operative parts of the hooks when they are engaged in the type of attachment just described is as follows. Each element 52 passes under a side piece 60 of the retainer bar in a zone adjacent the bend 64, and the extensions 50 pass over the cross-piece 62 adjacent said bends (see FIGS. 1–4). The right angle bends 66 of the bracket 38 which are between the extensions and elements fit against the inner surfaces (i.e. the surface facing the child) of the bends 64 of the retainer bar. Because of the thickness of the bar, the extensions 50 extend forwardly and upwardly at an angle of about 45° with respect to the horizontal plane of the retainer bar when the hooks are in place (see FIG. 2). As a result, the short reaches 42 which lie in a plane parallel to the extensions also project forwardly and upwardly at an angle of 45°. Since the short reaches are parallel to the top panel 20 of the platform, the platform itself is held in the position shown in FIG. 2. This causes the panel 20 to be slanted so as to face the child more directly.

The force of gravity biases the platform downwardly and causes the extensions 50 to press downwardly against the cross-piece 62 and the elements 52 to press upwardly against the side pieces 60. This play of forces securely suspends the platform in the overhanging position shown in FIG. 2.

Some feeding chairs and high-chairs do not include a retainer or similar U-shaped bar. Accordingly, the attaching bracket is secured to such objects by engaging the hooks with an edge of the top tray 68 thereof, as shown in FIG. 5. More specifically, the finger 56 of each hook is disposed below the side edge of the tray adjacent the rear edge (i.e. the edge facing the child) of the tray 68, so that the cap 58 of each hook abuts the underside of the tray with the platform resting on the top of the tray. For this type of attachment, the short reaches 42 must be somewhat wider than the distance between the legs 54 whereby to make it necessary to spread the short reaches apart, i.e. move the hooks away from one another, in order to engage the fingers and caps under the rim of the panel. The tendency of the short reaches to converge tends to hold the legs 54 against the sides of the tray and to, therefore, maintain the fingers and caps below the same. It will be observed that the platform is not suspended in this type of attachment; however, the trapezoidal configuration of the side walls 64 results in the top panel thereof being slanted forwardly and upwardly so as to make the toy easy to play with and so as to create the illusion of an actual automobile dashboard.

The short reaches 42 of the bracket can be flexed either outwardly or inwardly with respect to one another in order to facilitate either type of attaching operation described above. In addition, the legs 54 may be flexed with respect to the extensions 50 in order to adjust the terminal hooks for different thicknesses of trays where the second method of attachment is employed. And, generally, the parts of the hooks may be turned or adjusted with respect to one another and with respect to the short reaches so as to better effect the type of attachment being employed with respect to any particular chair.

The brackets can be secured to the platform in the reverse position from that shown in FIGS. 1–4. In such reverse position the parts of the terminal hooks 39 would be oriented as follows: The offsetting arms 48 project downwardly with respect to the plane of the reaches 42, the extensions 50 project rearwardly, the elements 52 project outwardly, and the fingers 56 project inwardly. With this orientation of the hook parts attachment of the bracket to chairs is the same as before but the platform 12 is higher.

A flexible strap 70 is provided and may be used to help secure the toy in place. Said strap is passed through the U-bend 46 of the long reach 40 and can be wrapped around any convenient object of the chair to which the toy is to be attached, for example, a lower stroller bar 72. This strap will be provided with a non-slip grip and provided with a toy and bracket which achieve the several objects of the invention and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiment above set forth, it is to be understood that all matter herein described or shown in the accom-
panying drawings is to be interpreted as illustrative and not in a limiting sense. Having thus described the invention, there is claimed as new and useful and desired to be secured by Letters Patent:

1. An attaching bracket for securing a toy having a front, rear, sides, and a top panel to a child's chair which chair has a tray with free side edges and/or a bar of U-shaped configuration and including a forward cross-piece secured to rearwardly extending side pieces: said bracket constituting a hardened spring metal wire including a long reach having two opposite free ends, a pair of short reaches each of which has a single end thereof integral with one free end of the long reach, each short reach having an end remote from the long reach, the short reaches extending away from the long reach and converging towards one another in the direction of the remote ends of the short reaches, all three reaches lying in the same horizontal plane, a pair of short arms, each arm having a single end thereof integral with a remote end of a short reach, the axis of each arm being disposed substantially perpendicular to the horizontal plane of its associated short reach, each arm having an end remote from its associated short reach, a pair of extensions, each extension having a single end thereof integral with a remote end of a short arm, said extensions being disposed in a horizontal plane parallel to that of the short reaches and in substantially the same horizontal plane as that of the short reaches and arms, each extension having an end remote from its associated arm, a pair of elements, each element having a single end thereof integral with a remote end of an extension, said elements projecting oppositely from one another at substantially right angles to the extensions and in the horizontal plane thereof, and means for detachably securing the bracket to a toy, whereby the toy can be manually detachably secured to a child's chair having a bar of U-shaped configuration by means of cooperation between the extensions and elements of the bracket, on the one hand, and the cross-piece and side pieces of the bar on the other hand.

2. An attaching bracket as set forth in claim 1, wherein the means for detachably securing the bracket to a toy comprises a U-bend on each reach, the U-bends lying in the same horizontal plane as that of the reaches and extending in a direction away from the area enclosed by the reaches, and adapted to support a toy in the front and sides, by receiving the U-bends in the slots.

3. An attaching bracket for securing a toy having a front, rear, sides, and a top panel to a child's chair, which chair has a bar of U-shaped configuration and including a forward cross-piece secured to rearwardly extending side pieces: said bracket constituting a hardened spring metal wire including a long reach having two opposite free ends, a pair of short reaches each of which has a single end thereof integral with one free end of the long reach, each short reach having an end remote from the long reach, the short reaches extending away from the long reach and converging towards one another in the direction of the remote ends of the short reaches, all three reaches lying in the same horizontal plane, a pair of short arms, each arm having a single end thereof integral with a remote end of a short reach, the axis of each arm being disposed substantially perpendicular to the horizontal plane of its associated short reach, each arm having an end remote from its associated short reach, a pair of extensions, each extension having a single end thereof integral with a remote end of a short arm, said extensions being disposed in a horizontal plane parallel to that of the short reaches and in substantially the same horizontal planes as that of the short reaches and arms, each extension having an end remote from its associated arm, a pair of elements, each element having a single end thereof integral with a remote end of an extension, said elements projecting oppositely from one another at substantially right angles to the extensions and in the horizontal plane thereof, and means for detachably securing the bracket to a toy, whereby the toy can be manually detachably secured to a child's chair having a bar of U-shaped configuration by means of cooperation between the extensions and elements of the bracket, on the one hand, and the cross-piece and side pieces of the bar on the other hand.
attached to a child's chair having a tray including free side edges by hooking of the fingers of the bracket under said edges.

6. An attaching bracket for securing a toy, having a toy shell and at least two opposed side flanges, to a child's chair which has a bar including a forward cross-piece secured to rearwardly extending side pieces; said bracket constituting a hardened spring metal wire including a long reach having two opposite free ends, a pair of short reaches, each of which has a forward end that is integral with one free end of the long reach, said reaches being coplanar, and a pair of outwardly directed elements connected to the rear ends of the short reaches, and means for detachably securing the bracket to a toy whereby a toy is adapted to be manually detachably secured to a bar forwardly of the cross-piece, the short reaches crossing over the top of the cross-piece and the elements crossing under the bottoms of the side pieces, said bracket overhanging the bar so that the weight of a toy presses the short reaches downwardly against the cross-piece and the elements upwardly against the side pieces.

7. An attaching bracket as set forth in claim 6 wherein the means for detachably securing the bracket to a toy includes a pair of outwardly extending protuberances on the short reaches, which protuberances are adapted to extend into slots in flanges of a toy.

8. An attaching bracket as set forth in claim 7 wherein the means for detachably securing the bracket to a toy includes a pair of outwardly extending protuberances on the long reach, which protuberance is adapted to be received in a slot in a front flange of a toy.

9. An attaching bracket as set forth in claim 6 wherein the short reaches include offsetting arms forwardly of the ends thereof.

10. In combination, a toy having front, rear, sides and a top panel, and an attaching bracket for securing the toy to a child's chair which has a tray with free side edges or a bar of U-shaped configuration that includes a forward cross-piece secured to rearwardly extending side pieces, said bracket constituting a hardened spring metal wire including a long reach having two opposite free ends, a pair of short reaches each of which has a single end thereof integral with one free end of the long reach, each short reach having an end remote from the long reach, the short reaches extending away from the long reach and converging towards one another in the direction of the remote ends of the short reaches, all three reaches lying in the same horizontal plane, a pair of short arms, each arm having a single end thereof integral with an end remote from the long reach, the arm being disposed substantially perpendicular to the horizontal plane of its associated short reach, each arm having an end remote therefrom integral with an end remote from the long reach, the arm being disposed substantially perpendicular to the horizontal plane of its associated short reach, and means for detachably securing the bracket to the toy, whereby the top can be manually detachably secured to a child's chair having a bar of U-shaped configuration by means of cooperation between the extensions and elements of the bracket, on the one hand, and the cross-piece and side pieces of the bar on the other hand, and whereby the toy can be manually detachably attached to a child's chair having a tray including a forward cross-piece by hooking of the fingers of the bracket under said edges.

11. In combination, a toy having front, rear, sides and a top panel, and an attaching bracket for securing the toy to a child's chair which has a bar of U-shaped configuration and that includes a forward cross-piece secured to rearwardly extending side pieces, said bracket constituting a hardened spring metal wire including a long reach having two opposite free ends, a pair of short reaches each of which has a single end thereof integral with one free end of the long reach, each short reach having an end remote from the long reach, the short reaches extending away from the long reach and converging towards one another in the direction of the remote ends of the short reaches, all three reaches lying in the same horizontal plane, a pair of short arms, each arm having a single end thereof integral with an end remote from the long reach, the arm being disposed substantially perpendicular to the horizontal plane of its associated short reach, each arm having an end remote therefrom integral with an end remote from the long reach, the arm being disposed substantially perpendicular to the horizontal plane of its associated short reach, and means for detachably securing the bracket to the toy, whereby the top can be manually detachably secured to a child's chair having a bar of U-shaped configuration by means of cooperation between the extensions and elements of the bracket, on the one hand, and the cross-piece and side pieces of the bar on the other hand.

12. In combination, a toy having a top panel and at least two opposed side flanges, and an attaching bracket for securing the toy to a child's chair which has a bar that includes a pair of outwardly extending side pieces, said bracket constituting a hardened spring metal wire including a long reach having two opposite free ends, a pair of short reaches, each of which has a forward end thereof integral with a remote end of a short arm, said extension being disposed in a horizontal plane parallel to that of the short reaches and in substantially the same vertical plane as that of the short reaches and arms, each extension having an end remote from its associated short reach, a pair of extensions, each extension having a single end thereof integral with a remote end of a short arm, said extensions being disposed in a horizontal plane parallel to that of the short reaches and in substantially the same vertical plane as that of the short reaches and arms, each extension having an end remote from its associated short reach, a pair of elements, each element having a single and thereof integral with a remote end of an extension, said elements projecting oppositely from one another at substantially right angles to the extensions and in the horizontal plane thereof, each element including an outer end remote from its associated extension, a pair of legs, each leg having a single end thereof integral with an outer end of an element, said legs extending slightly away from one another and in the direction of the horizontal plane of the reaches at an angle of about 45° with respect to said horizontal plane, each leg having an end remote from its associated element, a pair of fingers, each finger having a single end thereof integral with a remote end of a leg, said fingers extending towards one another, each finger including an end remote from its associated leg, and a cap on the remote end of each finger, and means for detachably securing the bracket to the toy, whereby the toy can be manually detachably secured to a child's chair having a bar that includes a forward cross-piece by means of cooperation between the extensions and elements of the bracket, on the one hand, and the cross-piece and side pieces of the bar on the other hand, and whereby the toy can be manually detachably attached to a child's chair having a tray including a forward cross-piece by hooking of the fingers of the bracket under said edges.

13. A combination as set forth in claim 12 wherein the opposed side flanges of the toy have slots therein and wherein the means for detachably securing the bracket to the toy constitutes outwardly extending protuberances on the short reaches which protuberances project through the slots of the flanges.

14. A combination as set forth in claim 13 wherein the toy has a front flange and wherein the long reach is forwardly bowed and dimensioned to be flexed rearwardly.
by the front flange of the toy when the protuberances are disposed in the slots.

15. A combination as set forth in claim 14 wherein the top has a slot in its front flange and wherein the means for detachably securing the bracket to the toy includes a forwardly extending protuberance on the long reach which protuberance is received in the slot in the front flange.

16. A combination as set forth in claim 12 wherein the short reaches include offsetting arms forwardly of the extensions.

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