J. J. WILLIAMS.

TOY VEHICLE.

APPLICATION FILED MAY 6, 1921.

1,412,381.

Patented Apr. 11, 1922

2 SHEETS—SHEET 1.

Fig. 1.

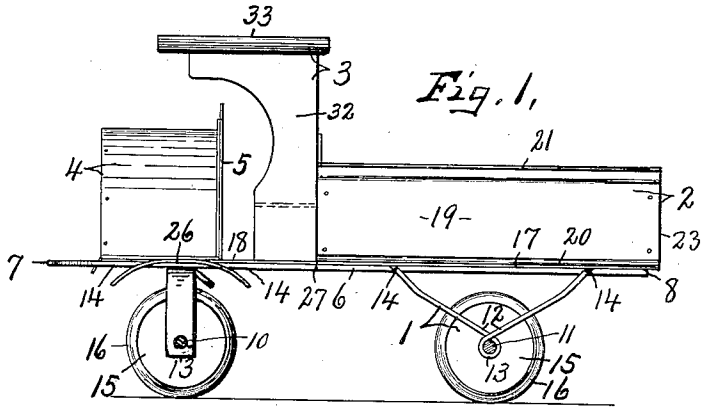


Fig. 2.

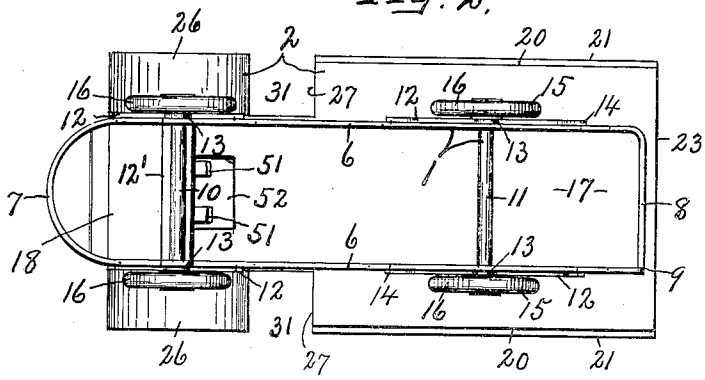


Fig. 11.

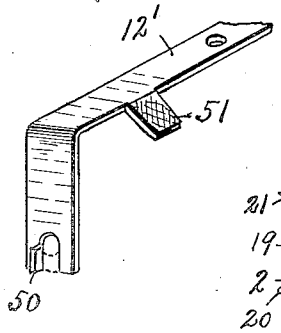


Fig. 3.

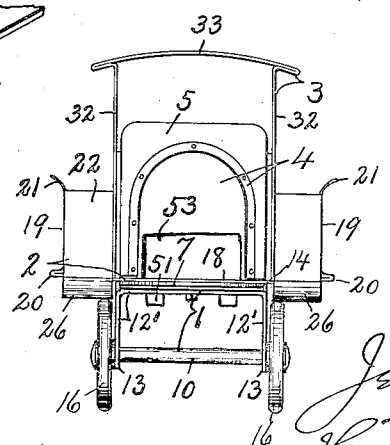
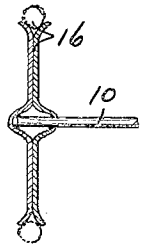


Fig. 10.



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2 SHEETS—SHEET 2.

Fig. 4.

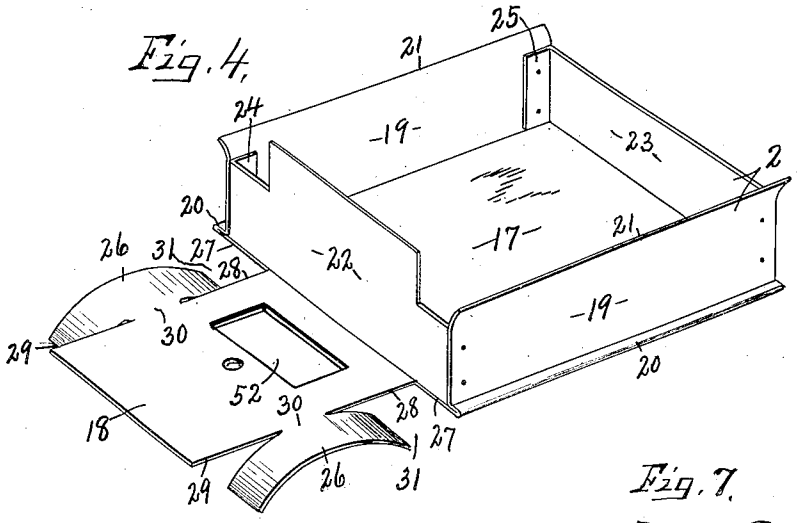


Fig. 7.

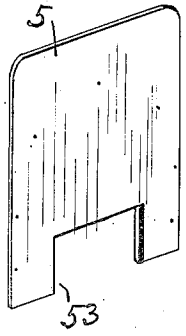


Fig. 5.

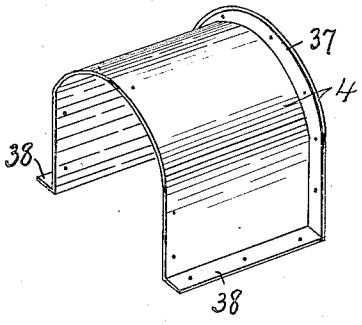


Fig. 8.

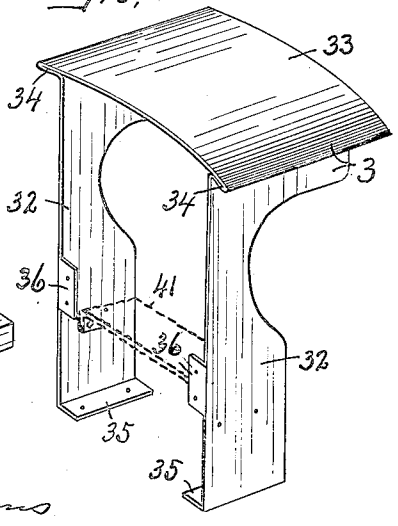


Fig. 6.

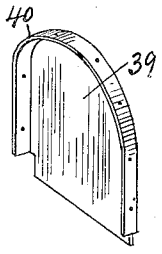
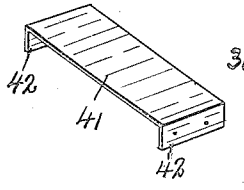


Fig. 9.



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UNITED STATES PATENT OFFICE.

JESSE J. WILLIAMS, OF UTICA, NEW YORK.

TOY VEHICLE.

1,412,381. Specification of Letters Patent. Patented Apr. 11, 1922.

Application filed May 6, 1921. Serial No. 467,441.

To all whom it may concern:

Be it known that I, JESSE J. WILLIAMS, a citizen of the United States of America, of Utica, in the county of Oneida, in the State of New York, have invented new and useful Improvements in Toy Vehicles, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to a toy vehicle in representation of an automobile truck in which practically all of the parts are made of thin sheet metal with the exception of the axles and chassis frame which are made of wire, the object being to provide a light, strong and durable toy truck which may be made and sold for use by children at a comparatively small cost.

Other objects and uses relating to specific parts of the device will be brought out in the following description:

Figs. 1, 2 and 3 are, respectively, a side elevation, a top plan and a front end view of a toy truck embodying the various features of my invention.

Fig. 4 is a perspective view of the detached body exclusive of the hood and cab.

Figs. 5 and 6 are perspective views of the main body and front wall, respectively, of the hood.

Fig. 7 is a perspective view of the detached dash-plate.

Figs. 8 and 9 are perspective views of the main body and seat, respectively, of the cab.

Fig. 10 is a detail sectional view of one of the wheels and adjacent end of one of the axles.

Fig. 11 is a perspective view of a portion of the steering bar.

As illustrated, the device comprises a chassis —1—, a body —2—, a cab —3—, a hood —4— and a dash —5—.

The frame of the chassis preferably consists of a single piece of wire bent in the form of a closed loop elongated in the direction of length of the vehicle and forming opposite parallel side bars —6—, a front cross bar —7— and a rear cross bar —8—, all disposed in substantially the same horizontal plane, the lengthwise bars —6— being spaced a distance apart considerably less than the width of the body —2— which is mounted directly thereupon, while the front cross bar —7— is arched forwardly, the rear cross bar —8— being disposed at substantially right angles to the side bars —7—, and the ends of the loop being rigidly secured to each other at —9— by spot welding or equivalent fastening means.

The chassis is also provided with front and rear axles —10— and —11—, the rear axle being supported in a pair of —V— shaped braces —12—, each brace consisting of a single piece of wire having its central portion bent in the form of an eye —13— and its opposite ends diverging upwardly from the eye and rigidly secured at —14— to the side bars —6— by spot welding or equivalent fastening means, the eyes —13— constituting journaled bearings for said rear axle —11—. The front axle is journaled in the lower ends of an inverted —U— shaped bar —12'— having its upper portion resting against the under side of the side bars —6— and centrally pivoted to the extension —18— by a pivotal bolt to permit it to turn horizontally for steering purposes, said axles being provided with suitable wheels —16—.

The body —2— comprises a sheet metal bottom plate —17— having an integral forward extension —18— and integral side wings —19—, which latter project upwardly equal distances from opposite edges of the flat bottom —17—, the portions of the body at the junctions of the bottom —17— and up-standing side wings —19— being returned inwardly a short distance toward each other to form double thick ledges —20— in imitation of running-boards and also serve as reinforcements to stiffen the sides and bottom, the upper edges of the side wings being deflected outwardly at —21— to render the body more realistic.

The bottom —17— and its forward extension —18— are disposed in substantially the same flat plane, the bottom —17— forming the lower wall of a box having front and rear end walls —22— and —23—, the ends of which are provided with inturned flanges —24— and —25—rigidly secured to the inner faces of the adjacent ends of the side wings —19— by spot welding or other equivalent fastening means, thus forming a substantially rectangular box, the bottom of which is rigidly secured by spot welding to the upper faces of the frame bars —6—. These frame bars extend forwardly and rearwardly some distance beyond the vertical planes of the front and rear axles —10— and —11—, while the box part of the body is mounted directly over the rear axle so as

to extend substantially equal distances forwardly and rearwardly therefrom, and is, therefore, substantially balanced.

The forward extention —18— is provided with integral mud-guards —26— formed by slitting the bottom —17— inwardly or transversely from the outer edges along lines —27— in substantially the same transverse vertical plane as the front end plate —22—, and substantially the same distance from the outer edges of the ledges —20—, and then additionally slitting the extension —18— forwardly from the lines —27— and along lines —28— toward the transverse center of said extension or equal distances from the front end board —22—, said extension being also slit rearwardly from its front edge along lines —29— toward the transverse center of said extension and equal distances from said edge in substantially the same vertical plane, the slits —28— leaving the mud-guards —26— integrally connected to the extension —18— by relatively narrow webs —30—, while the severed ends of the mud-guards are bent downwardly substantially concentric with the axis of the front axle —18—, said mud-guards being disposed wholly at the outside of the adjacent braces —12—.

The width of the extension —18— across the central portions of the mud-guards —26— is substantially equal to the width of the bottom of the box or between the opposite longitudinal edges of the ledges —20—, and by cutting and bending the mud-guards in the manner described leaves the major portion of the extension of slightly greater width than the distance between the outer edges of the side rails —6— of the main frame so that when the rear ends of the mud-guards are bent downwardly, they form open spaces —31— between them and the front end of the box to allow the entrance and exit of the children to and from the cab.

The cab is preferably made of a single piece of sheet metal bent substantially—U—shape to form opposite upright sides —32— and a top —33—, the portions of the cab at the junctions of the sides and top being returned upon themselves to form outwardly projecting ledges —34— for stiffening purposes and also for deflecting rain and snow beyond the side walls.

The lower portions of the uprights —32— are arranged in parallel spaced relation corresponding approximately to the width of the narrower portion of the extension —18—, and are provided along their lower edges with inturned flanges —35— which are rigidly secured to the upper face of the extension —18— by spot welding or equivalent fastening means.

The rear upright edges of the side portions —32— are provided with inturned flanges —36— which are secured by spot welding to the front face of the front end board —22— of the box body to additionally hold the cab firmly in fixed relation to said body, the top portion —33— being of considerably greater length than the width of the side portions —32— and projects some distance forwardly beyond the front edges of the side portions to slightly overhang the hood —4—.

The main body of the hood —4— is preferably made of a single piece of sheet metal bent —U— shape and having its rear edge and opposite ends provided with out-turned flanges —37— and —38—, the flanges —38— being secured by spot welding to the upper face of the extension —18— in front of the cab —3—, while the flange —37— is similarly secured to the dash plate —5— so that the latter will be disposed directly in front of the cab and across the rear end of the hood.

The front end of the hood is normally closed by a plate —39— of substantially the same cross-sectional form as that of the hood and provided with a marginal flange —40— which is secured by spot welding to the inner face of the main body of the hood.

A suitable seat —41— also of sheet metal is provided with end flanges —42— secured by spot welding to the inner faces of the upright sides of the cab —3—, thus completing the toy vehicle which may obviously be made and sold at comparatively small cost, and at the same time is strong and durable, and capable of use by children for various purposes.

Each wheel preferably consists of a pair of sheet metal disks (Fig. 10) secured together by spot welding to form a peripheral groove for receiving a rubber tire, the central portions of said disks being struck up to form hubs into which the ends of the axles —10— and —11— are inserted and secured by spot welding.

The lower ends of the steering bar —12′— are provided with bendable tongues —50— (Fig. 11) forming the lower sides of the journal bearings for the front axle —10— to permit said axle with the wheels thereon to be inserted from the underside into said bearings when the tongues are openend, after which the tongues are closed to hold the axle in place. The upper horizontal portion of the bar —12′— is provided with integral pedals —51—, which are accessible to the feet of the operator through openings —52— and —53— in the extension —18— and dash —5—, respectively.

What I claim is:

1. In a toy truck, a box-supporting-frame consisting of a single piece of wire bent in to the form of a closed loop and elongated in the direction of length of the body, wire braces having their ends rigidly secured to

opposite sides of said wire frame and their intermediate portions bent into the form of eyes, an axle journaled in said eyes, wheels on the axle, and a body mounted on the wire frame and rigidly secured thereto.

2. A toy truck, comprising a chassis frame made of a single piece of wire bent into the form of a closed loop and having its ends rigidly secured together, braces secured to said wire frame and provided with journaled bearings, an axle journaled in said bearings, wheels mounted on the axle, and a body mounted on the wire frame and rigidly secured thereto.

3. A toy truck, a body having a flat sheet metal bottom provided with integral upstanding side wings along its opposite edges, the portions of the body at the junctions of the bottom and side wings being returned inwardly to form double thick ledges at said junctions.

4. A toy truck, a body having a flat sheet metal bottom provided with integral upstanding side wings along its opposite edges, the portions of the body at the junctions of the bottom and side wings being returned inwardly to form double thick ledges at said junctions, said bottom having a forward extension and mud-guards integrally united to opposite ends of the extension substantially mid-way between their ends, the ends of said mud-guards being detached from the extension and deflected downwardly.

5. In a toy truck, the combination of a chassis frame, a substantially flat sheet metal body bottom secured to the frame and provided with a forward extension having integral mud-guards along its opposite longitudinal edges, the ends of said mud-guards being detached from the extension and deflected downwardly, and a one-piece sheet metal cab secured to the upper face of said extension at the rear of the mud-guards.

6. In a toy truck, a body comprising a box provided with a bottom having an integral forward extension, portions of opposite sides of said extension being severed and the severed portions bent downwardly to form mud-guards.

7. In a toy truck, a body comprising a box and a forwardly extending platform integral with the bottom of the box, and an inverted U-shaped cab of sheet metal having the lower ends of its arms secured to the platform, the portion of the cab at the junctions of the sides with the top being folded upon themselves to form double thick cornices with the laterally projecting flanges.

In witness whereof I have hereunto set my hand this 29th day of April, 1921.

JESSE J. WILLIAMS.

Witnesses:
H. E. CHASE,
M. R. COOKE.