H. T. KINGSBURY.

TOY VEHICLE.

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922,914. Patented May 25, 1909.

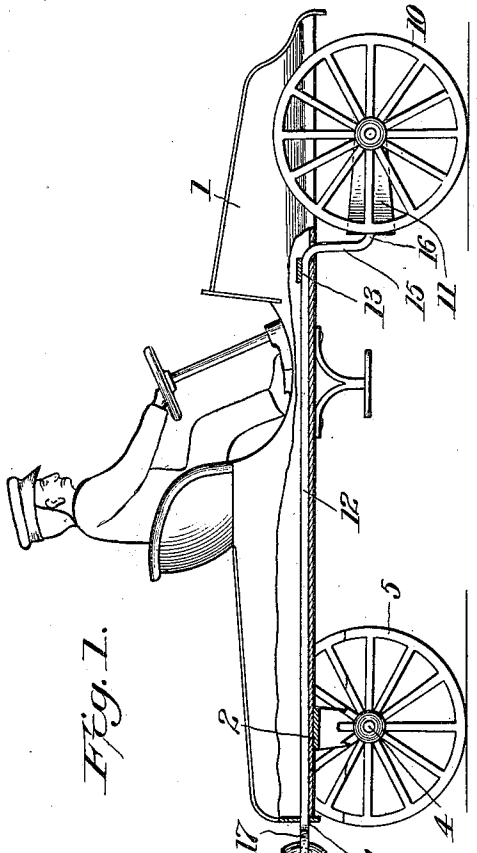


Fig. 1.

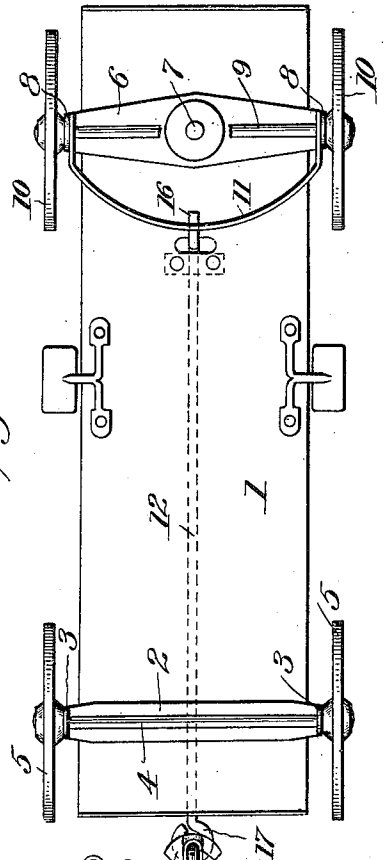


Fig. 2.

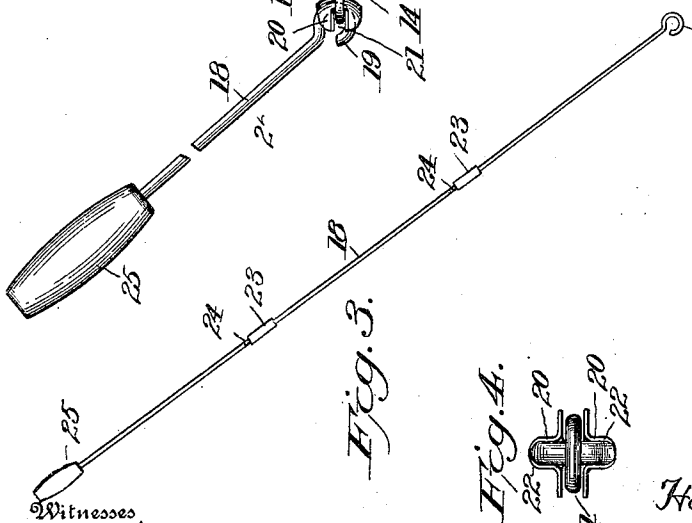


Fig. 3.

Fig. 4.

Witnesses

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TOY VEHICLE.

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To all whom it may concern:

Be it known that I, HARRY T. KINGSBURY, a citizen of the United States, residing at Keene, in the county of Cheshire, State of New Hampshire, have invented certain new and useful Improvements in Toy Vehicles, of which the following is a description, reference being had to the accompanying drawing, and to the figures of reference marked thereon.

My invention relates to new and useful improvements in vehicles and more especially to an improvement in toy vehicles.

The object of my invention is to provide mechanism operating through the running wheels of the toy or vehicle, for guiding the same, combined with the device for pushing and steering said toy or vehicle.

A further object of my invention is to provide a universal connection between the guiding means on the vehicle and the rod or device connected thereto, for pushing and steering said vehicle.

Further objects of my invention will in part be obvious and will in part be more fully hereinafter described.

In the drawings which show by way of illustration one embodiment of my invention; Figure 1 is a side elevation with certain parts in section, showing a toy vehicle with my improved mechanism applied thereto. Fig. 2 is a bottom plan view of the same; Fig. 3 is a detail view of the combined pushing and steering rod. Fig. 4 is a detail view of the universal connection between the push rod and the guiding mechanism.

In the present embodiment of my invention, I have shown a toy vehicle which is provided with a body portion 1, in the shape of an automobile. It is obvious however, that the body portion of the vehicle may be in any other form than that herein shown. The body portion of the vehicle has secured thereto a bracket 2, having downwardly projecting arms 3, which are perforated to receive the axle 4, which carries the running wheels 5, 5 at its outer ends.

At the forward end of the vehicle body 1, is a bracket 6, which is pivoted at 7 to the vehicle body. This bracket is provided with downwardly extending arms 8, 8, which are perforated to receive the axle 9, on which is mounted the front wheels 10, 10 of the vehicle. A second U-shaped bracket 11 is perforated at its outer ends and the axle 9 passes through said perforations. A guiding rod or shaft 12 is located within the vehicle body and retained in position for oscillation therein by a bearing 13 at the forward end and a bearing formed by an opening 14 in the body portion of the vehicle at the rear end.

The guiding rod or shaft 12 at its forward end, is bent downward at 15 and then forward at 16, and passes through an opening in the U-shaped bracket 11. It will be obvious that if the rod 12 is oscillated, the downwardly bent portion 15 will be oscillated back and forth, and through its connection with the U-shaped bracket 11, cause the front axle for the driving wheels 10, 10 to be turned one way or another about the pivotal point 7. It will thus be seen, that as the guiding rod or shaft 12 is oscillated, the vehicle may be guided in one direction or the other. The rear end of the guiding rod or shaft 12 is provided with an eye 17. The push rod 18 is provided with a similar eye 19 at its lower end, which is slightly opened so that said eye may be readily engaged with the eye 17 on the guiding rod or shaft.

In order that the push rod may be used for communicating an oscillatory movement to the guiding rod with little or no lost motion, I have provided a clip 20, which as shown in Fig. 4, is bent up from a single piece of sheet metal, so as to provide passages or ways 21 and 22, at right angles to each other, which conform in shape to the eyes 17 and 19 respectively. The clip 20 is inserted in the eye 17 on the guiding rod 12 with the eye thereof located in the passage or way 21, and then the eye 19 on the push rod is inserted through the passage or way 22, and through the eye 17. It will be seen that the push rod 18 may be raised or lowered or moved laterally and that all oscillatory movements of the push rod, will be communicated to the guiding rod 12. As shown in the drawings, the push rod is made in sections, said sections being preferably secured together by forming a collar 23 on one of said sections, which is engaged by the threaded end 24 of the other section. A suitable handle 25 is provided on the outer end of the push rod.

Having thus particularly described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A vehicle including in combination a body portion, guiding wheels pivotally con-

nected to said body portion, a combined pushing and steering device extending behind said vehicle and means operated by said device for turning the guiding wheels on the pivot.

2. A vehicle including in combination, a body portion, running wheels connected to the rear end thereof, running wheels pivotally connected to the forward end thereof, mechanism for turning said forward running wheels on the pivot, and a combined pushing and steering rod connected to said turning mechanism and extending behind said vehicle.

3. A vehicle including in combination, a body portion, running wheels connected to the rear end thereof, running wheels pivotally connected to the forward end thereof, mechanism for turning said forward running wheels on the pivot, and a combined pushing and steering rod having a universal connection to said turning mechanism.

4. A vehicle including in combination, running wheels, mechanism operating through said running wheels for guiding said vehicle, said mechanism including an eye, a push rod having an eye connected to said first named eye, and means for limiting the axial rotation of the push rod, relative to the eye on the guiding mechanism.

5. A vehicle including in combination, running wheels, mechanism operating through said running wheels for guiding said vehicle, said mechanism including an eye, a push rod having an eye connected to said first named eye, a clip carried by one of said eyes and engaging the other eye, for limiting the axial rotation on the push rod, relative to the guiding mechanism.

6. A vehicle including in combination, a body portion, running wheels pivotally connected at the forward end thereof, a guide rod extending longitudinally of said body portion, means operating through said guiding rod for turning said running wheels on the pivot to guide the vehicle, and a combined pushing and steering rod connected to said guiding rod.

7. A vehicle including in combination, a body portion, running wheels pivotally connected at the forward end thereof, a guiding rod extending longitudinally of said body portion, means operating through said guiding rod for turning said running wheels on the pivot to guide the vehicle and a combined pushing and steering rod connected to said guiding rod, the connection between said push rod and said guiding rod including a clip for limiting the axial rotation of said push rod, relative to said guiding rod.

8. A vehicle including in combination, guiding mechanism comprising a guiding rod having an eye therein, a push rod having an eye therein for engaging the eye on the guiding rod, and a clip having passages at right angles to each other for receiving said eyes and limiting the axial movement of said push rod relative to said guiding rod.

9. A vehicle including in combination, guiding mechanism comprising a guiding rod having an eye therein, a push rod having an eye therein for engaging the eye on the guiding rod, and a clip formed of sheet metal, bent to provide passages or ways at right angles to each other, to receive said eyes and limiting the axial movement of the push rod relative to said guiding rod.

10. A vehicle including in combination a body portion, running wheels secured thereto, the forward wheels being pivoted to the body portion, a guiding rod for turning the forward running wheels on the pivot for guiding the vehicle said guiding rod extending longitudinally of said body portion and mounted in bearings therein and having a downwardly extended portion at its forward end forming a crank arm for transmitting movement for turning the running wheels relative to the body portion for guiding the same and a push rod having universal connection with said guiding rod.

11. A vehicle including in combination running wheels, mechanism operating through said running wheels for guiding said vehicle, a combined sectional pushing and steering rod, having a universal connection with said guiding means.

In testimony whereof I affix my signature, in presence of two witnesses.

HARRY T. KINGSBURY.

Witnesses:
M. L. MASON,
L. T. LITCHFIELD.