

R. C. ROBINSON.

GO-CART.

APPLICATION FILED AUG. 25, 1909.

961,163.

Patented June 14, 1910.

2 SHEETS—SHEET 1.

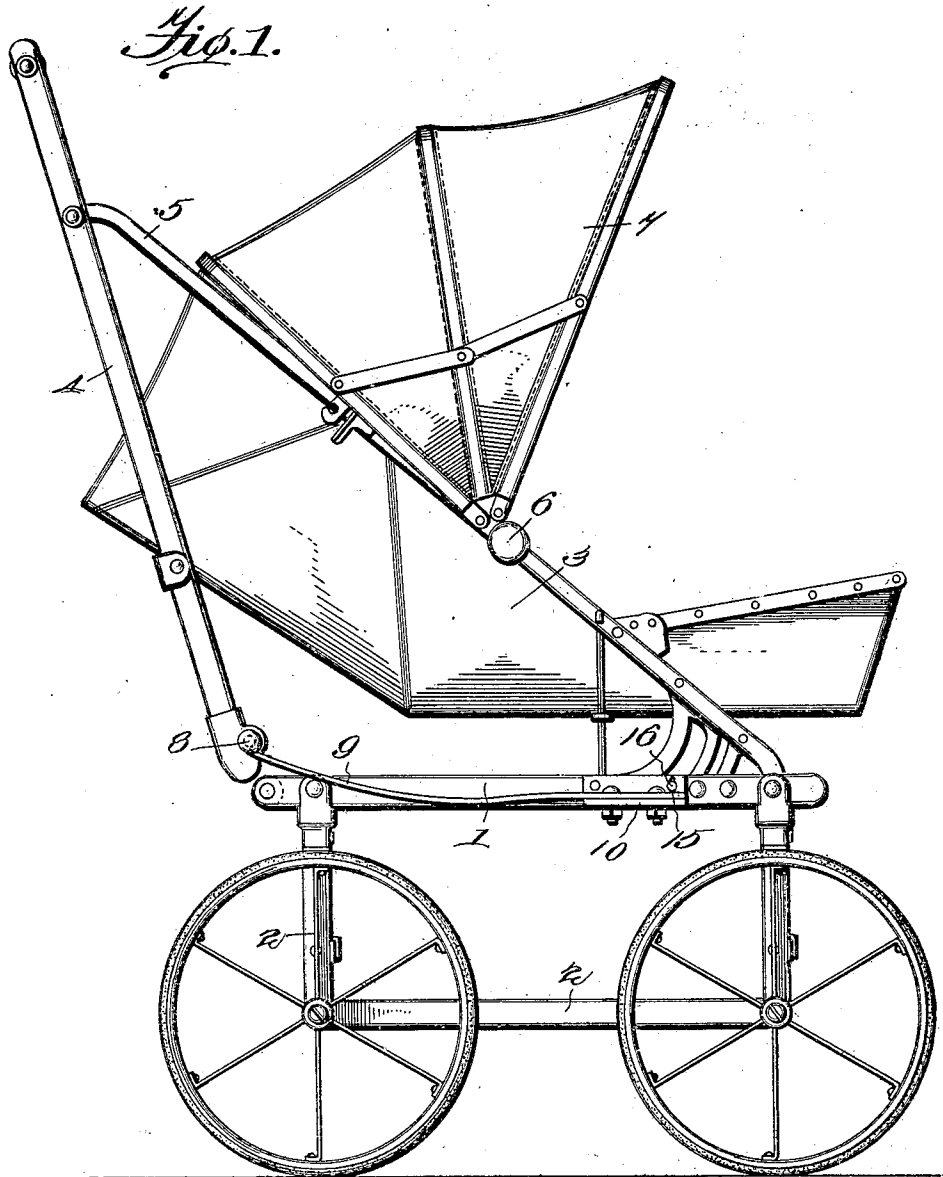
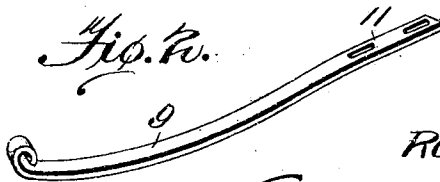


Fig. 2.



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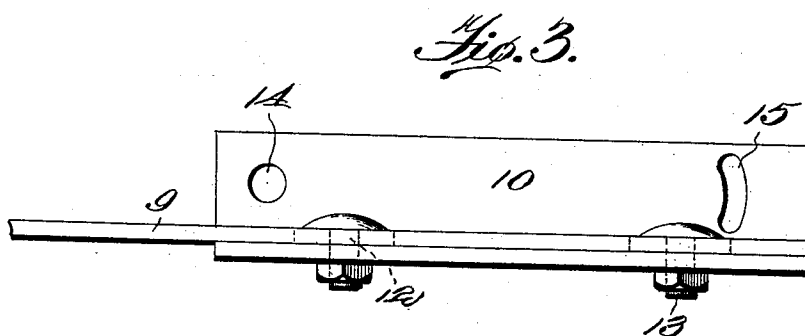
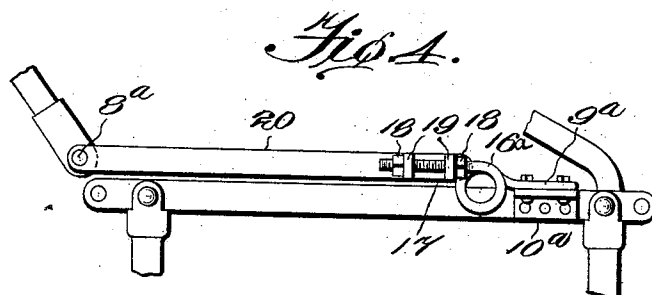
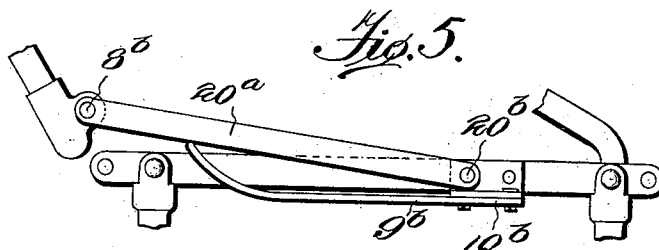
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UNITED STATES PATENT OFFICE.

RALPH C. ROBINSON, OF BOISE, IDAHO.

GO-CART.

961,163.

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To all whom it may concern:

Be it known that I, RALPH C. ROBINSON, a citizen of the United States, residing at Boise, in the county of Ada and State of Idaho, have invented certain new and useful Improvements in Go-Carts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in go-carts of the type known as folding go-carts.

The objects and advantages of the particular construction appear from the following description, and the particular features of novelty will be more succinctly pointed out in the claims.

While the invention is not limited to the exact details shown and described, still for the purpose of disclosure reference is had to the accompanying drawings illustrating a practical embodiment of the invention, in which like characters designate the same parts in the several views, and in which—

Figure 1 is a view in side elevation showing my invention applied to a go-cart. Fig. 2 is a detail perspective view of one of the supporting springs. Fig. 3 is a detail view in side elevation of the angle plates with the springs connected thereto and showing the curved vertical slot for adjusting the angle plate vertically. Fig. 4 is a detail view in side elevation showing a modified arrangement of the spring supports, and Fig. 5 is a similar view to Fig. 4 showing a further modification.

1 designates the gear rail of a folding go-cart provided with the usual framework 2 on each side of the longitudinal gear rails, and provided with wheels adapted to be folded beneath the gear rail.

3 designates the body of the go-cart supported at its back by the handles 4, and also supported by the stay rod 5 having a breakable joint 6, 7 designating a folding top pivoted on the stay rod 5.

So far the construction is substantially similar to go-carts already in use, and in adapting my invention to this style of vehicles, instead of pivoting the handle 4 to the gear rails, I pivotally connect the lower ends of the handles with spring operating supports. In Figs. 1 to 3 these supports are

illustrated as simply consisting of flat elongated springs 9 located on each side of the vehicle frame and pivotally connected to the handles, as at 8. The other ends of the springs 9 are secured to the gear rail by means of suitable connections, and these springs may be either on the outside or the inside of the gear rails, although on the drawings I have shown them on the outside.

The inner ends of the springs may be secured to the gear rails in any suitable way, and the simple method of doing this is shown in Figs. 1 to 3 where angle plates 10 are provided on each side of the gear rail and the inner ends of the springs rest on the horizontal webs of these angle plates and may be securely bolted thereto. In these figures I have shown the inner ends of the springs as being provided with slots 11, the horizontal webs of the angle plates being provided with bolt holes 12 through which are passed the short bolts 13, and by this construction the spring may be readily attached to the angle plate and the spring may be lengthened or shortened by the bolt and slot connection. In this construction the angle plate is bolted at one end to the gear rail through the bolt hole 14, and at its other end is provided with a vertical slot 15 cooperating with a locking bolt 16, the slot 15 being curved in an arc having 14 as its center, so that the angle plates can be adjusted vertically a limited distance.

In Fig. 4 the arrangement is substantially the same, although a little different form of spring support is employed. In this construction the angle plate 10^a is disposed with its horizontal web in an upper position, and on this horizontal web is bolted the spring 9^a which may be provided with one or more spirals 16^a and terminating in a threaded bolt arm 17 directed rearwardly and provided with suitable locking nuts 18, the threaded bolt arm being adapted to pass through apertured lugs 19 carried at the inner end of the spring supported arms 20, which latter at their free ends are pivotally connected to the handle of the go-cart, as at 8^a.

In Fig. 5 the angle plates 10^b have their horizontal web in a lowermost position, as in Fig. 1, and to this web is bolted the flat spring 9^b the rear end of which curves upwardly and supports the arm 20^a pivotally connected at its forward end, as at 20^b, to

the gear rail or angle plate, and at its rear end pivotally connected, as at 8^b, to the handle of the go-cart.

In Figs. 4 and 5 it will be apparent that the angle plates may be provided with vertical slots, as at 15 in Fig. 3, in order that the plates may be adjusted vertically a limited distance if desired. This vertical adjustment permits the springs to be adapted to the increasing weight of the child occupying the go-cart, and by the bolt and slot connections 11, 12 and 13 in Figs. 1 to 3, and by the threaded bolt arm arrangement in Fig. 4 the effective length of the spring may be increased or decreased by adjustment to increase or decrease the resiliency of the spring if this is desired.

I am aware of the fact that it has been known to provide baby carriages with springs of various characters, and also I am aware of the fact that springs have been applied to the style of vehicles known as go-carts, but by the present particular arrangement and the disposition of the springs, or the spring supports, and their pivotal connection at one end, directly with the handles of the go-cart, there is provided means whereby any sudden jolts or jars are absorbed, and at the same time permitting the body of the carriage to be resiliently mounted to provide comfort for the occupant. Another advantageous feature of this particular mounting of the springs is that the lower ends of the handle being pivotally supported directly by spring supports, the attendant pushing the go-cart will have more control over the springing motion of the body portion, as will be evident.

Having now described the invention, what I claim is:—

1. The combination with the running gear, of a spring support secured at one end to said running gear, a handle pivotally supported by the other end of said spring support, stay rods connected to said running gear at one end and pivotally connected to said handle at their other ends, and a body supported by said stay rods; substantially as described.

2. The combination of a running gear provided with gear rails, a spring support adjustably mounted at one end on said gear rails, a handle pivotally connected at its

lower end to the other end of said spring support, stay rods connected at one end to said running gear and at their other ends pivotally connected to said handle, and a body supported by said stay rods, substantially as described.

3. The combination of a running gear provided with gear rails, a pair of spring supports each being secured at one end to one of said gear rails, a handle pivotally supported at its lower ends by the other ends of said spring supports, stay rods secured at one of their ends to said running gear and at their other ends pivotally connected to said handle, and a body portion supported by said stay rods and handle, substantially as described.

4. In a go-cart the combination of a running gear, provided with gear rails, a pair of elongated springs each adjustably connected at one end to said gear rails, a handle pivotally supported at its lower ends by the other ends of said springs, stay rods connected at one end to said gear rails and at their other ends pivotally connected to said handle, and a body portion supported by said stay rods and said handle, substantially as described.

5. The combination of a running gear provided with gear rails at each side of the top thereof, angle plate members pivotally secured to said gear rails, elongated spring members supported at one end by the horizontal webs of said angle plate members, slots being provided in one set of members coöperating with securing bolts to adjust the relative length of said spring members, and a vertical slot being provided in the vertical web of said angle plate members to permit of their vertical adjustment, a handle pivotally supported at its lower end by the free end of said spring members, stay rods secured at one end to said running gear and at their other ends pivotally connected to said handle, and a body portion supported by said stay rods and said handle, substantially as described.

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

RALPH C. ROBINSON.

Witnesses:

WM. C. DUNBAR,
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