R. G. LEDIG.

FOLDING GO-CART.

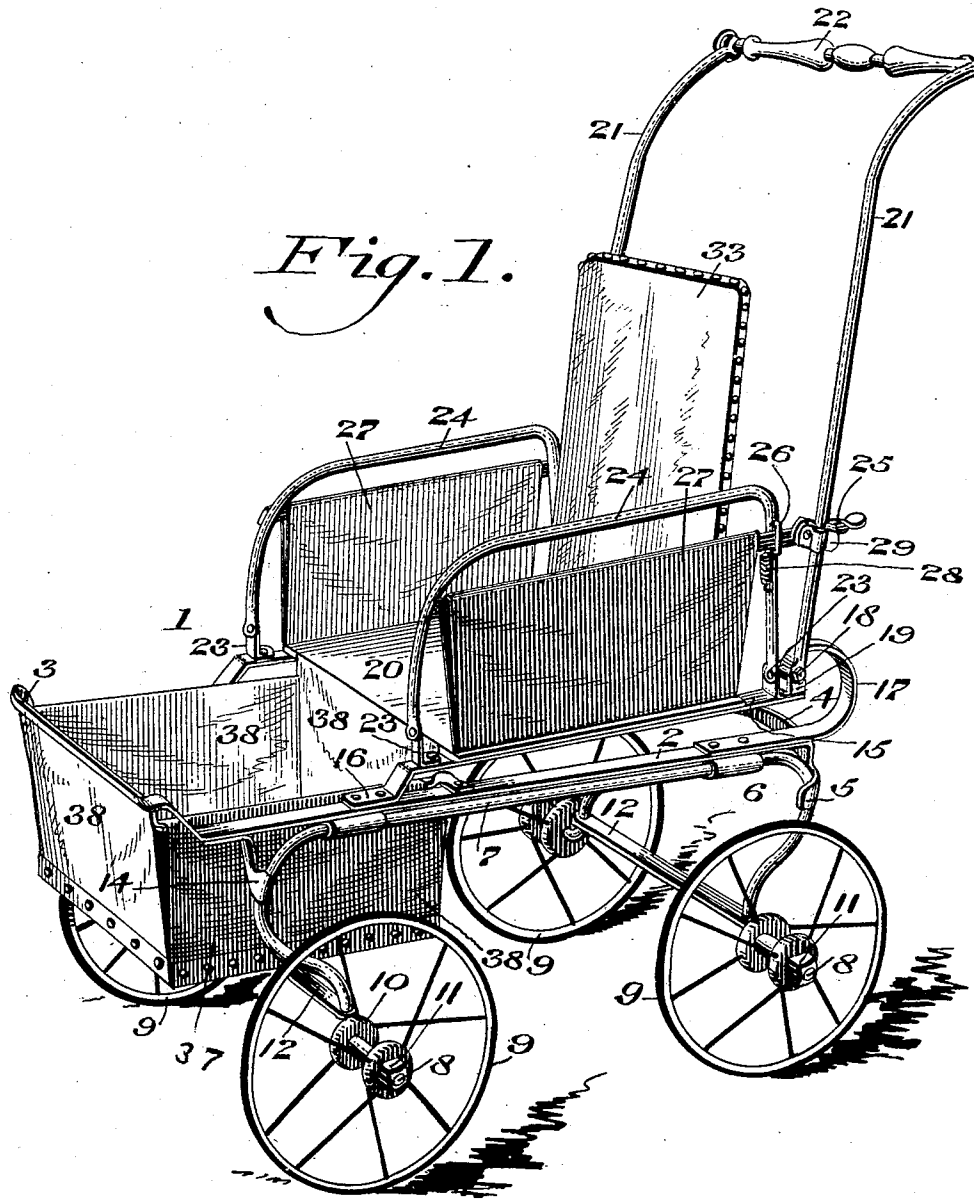
APPLICATION FILED JAN. 6, 1908.

904,542.

Patented Nov. 24, 1908.

3 SHEETS—SHEET 1.

Fig. 1.



Witnesses

P. F. Nagle.

L. Douville.

Inventor

Richard G. Ledig.

By Wiederscheim & Faulkner.

Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

R. G. LEDIG.

FOLDING GO-CART.

APPLICATION FILED JAN. 6, 1908.

904,542. Patented Nov. 24, 1908.

3 SHEETS—SHEET 2.

Fig. 2.

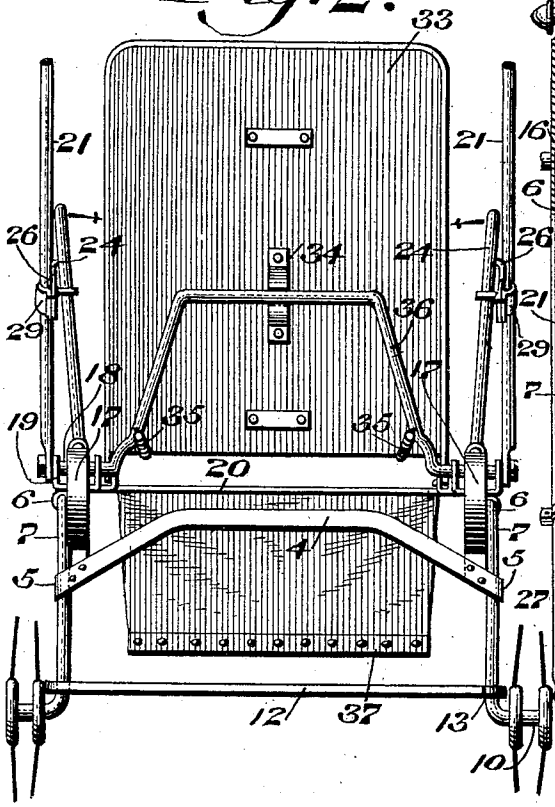


Fig. 3.

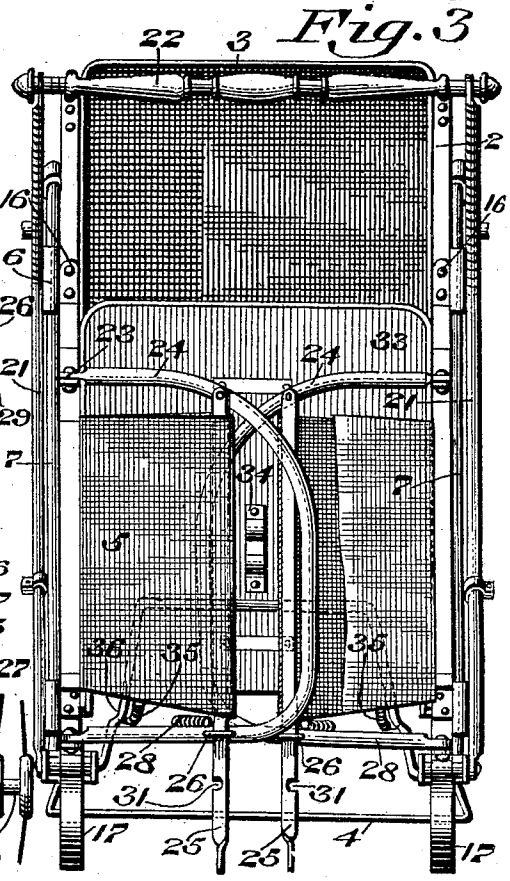


Fig. 4.

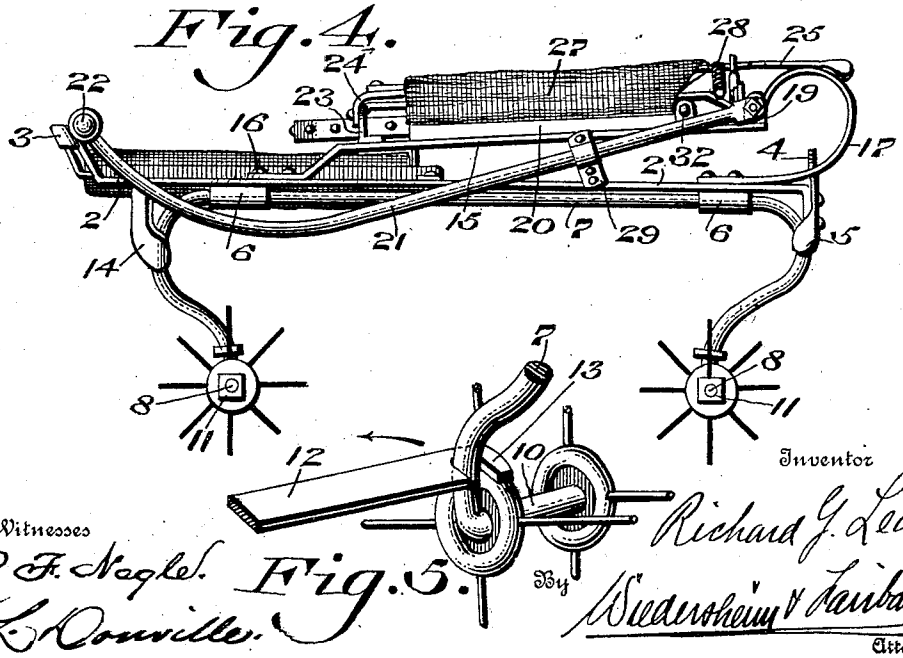


Fig. 5.

Witnesses

P. F. Nagle.

L. Conville.

Inventor

Richard G. Ledig.

By Wedderburn & Fairbanks.

Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

R. G. LEDIG.

FOLDING GO-CART.

APPLICATION FILED JAN. 6, 1908.

904,542.

Patented Nov. 24, 1908.

3 SHEETS—SHEET 3.

Fig. 6.

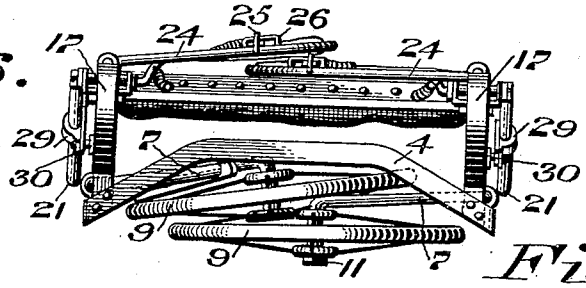


Fig. 7.

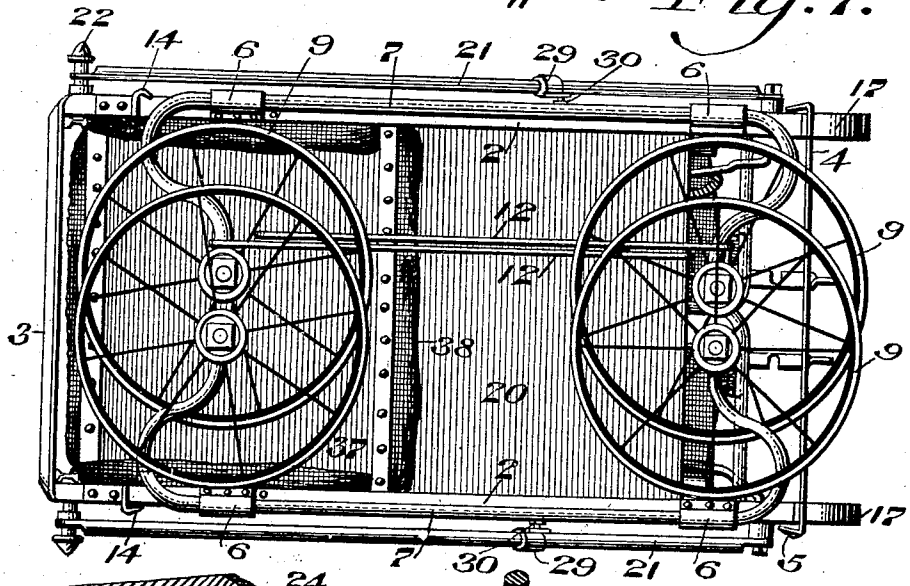


Fig. 8.

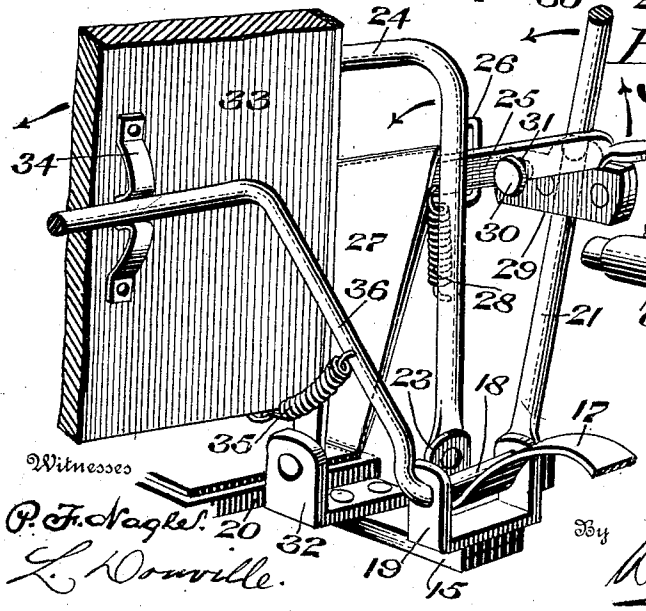
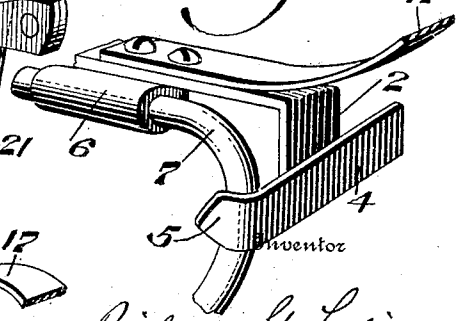


Fig. 9.



Witnesses

P. F. Nagle.

L. Domville.

Inventor

Richard G. Ledig.

By Widdersheim & Fairbanks,

Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

RICHARD G. LEDIG, OF PHILADELPHIA, PENNSYLVANIA.

FOLDING GO-CART.

No. 904,542. Specification of Letters Patent. Patented Nov. 24, 1908.

Application filed January 6, 1908. Serial No. 409,378.

To all whom it may concern:

Be it known that I, RICHARD G. LEDIG, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Folding Go-Cart, of which the following is a specification.

My invention relates to a new and useful collapsible or folding go-cart and consists of novel means for movably supporting the running gear.

It further consists of novel means for supporting the seat proper.

It further consists of a novel support for the sides or arm pieces.

It further consists of novel means for supporting the back.

It further consists of other novel features of construction, all as will be hereinafter fully set forth.

Figure 1 represents a perspective view of a collapsible or folding go-cart embodying my invention. Fig. 2 represents a rear elevation thereof showing the parts broken away. Fig. 3 represents a top plan view showing some of the parts in closed position. Fig. 4 represents a side elevation showing the parts closed and having the running gear partly broken away. Fig. 5 represents a perspective view of a portion of the running gear with some of the parts broken away. Fig. 6 represents a rear end view showing the parts in closed position. Fig. 7 represents a bottom view with the parts closed. Fig. 8 represents a perspective view of some of the parts on an enlarged scale in detachable position. Fig. 9 represents a perspective view of a portion of the device.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings. I have found in practice that it is necessary in folding or collapsible go-carts to provide not only a strong and durable construction, when the parts are in operative position, but also to form the same in such a manner that the parts can be easily operated.

In the drawings, I have shown a construction for carrying out my invention but it will be understood that the arrangement of the parts may be varied and other instrumentalities may be employed which will accomplish the same purpose and I do not therefore desire to be limited in every instance to the exact construction as herein shown and described, but desire to make such changes as will come within the scope of the invention.

1 designates my go-cart which is formed of a frame having the side rails 2, the front end rail 3 and the rear end rail 4, which in the present instance is riveted or otherwise secured to the side rails, as will be understood from Fig. 2, and which is provided with the extensions 5, which serve as stops or locks for the running gear, as will be hereinafter described. Suitably secured to the side rails 2 are the loops or journals 6 in which are movably mounted the rods 7 which are bent downwardly and then outwardly forming the axles 8 for the wheels 9 of the go-cart, which latter are provided with the hubs 10 held in place on the axles 8 by nuts 11. It will be seen from the above that the axle for the wheels is formed integral with the rods 7, that is to say, the support for the running gear on each side of the cart is formed of a single piece of material and that this insures the proper positioning of the wheels with respect to each other and at the same time the proper turning-in of the wheels, as will be hereinafter described.

12 designates bars, one end of each of which is connected with one side of the downward extending portion of the bars 7, the opposite end of the bars 12 being provided with a slot 13 which is adapted to receive and engage with the downward extending portion of the bars 7 on the opposite side of the cart, so that when the wheels are in operative position the bars 12 extend between the rods 7 serving to hold and lock the wheels and axles in position but by removing the bars 12 out of engagement with one of the rods 7 the bars can be swung upon the opposite side in order that the wheels may be turned-in, as best understood from Fig. 7. When the wheels are in operative position and the bars 12 in place, the stop 5 prevents outward movement of the rear wheels, while attached to the frame of the side bars 2 at any suitable point are stops 14 which engage with the front end of the rods 7, in order to prevent outward movement thereof. In this way a positive lock is provided for the wheels, since the bars 12 prevent inward movement and also assist in preventing outward movement, which is positively prevented by stops 5 and 14.

15 designates arms which are connected

as at 16 with the side bars 2, the opposite ends of which are supported by a spring 17, one end of which is connected with the side bars 2 and the opposite end of which is curved upwardly and is connected with a pin 18 carried by ears 19, which are supported on the arms 15, so that in this way the rear end of the said arms 15 are suitably spring-supported and as these bars carry the plate 20 which serves as a seat for the go-cart, it will be seen that I provide a cushioned seat, as will be evident. Connected with the pins 18 on opposite sides of the cart are the handle bars 21 connected by a suitable handle 22, it being seen that in this manner the handle will be spring-supported as well as the seat, the advantage of which will be evident.

Pivotally connected with the ears 23 on the arms 15 are the side or arm pieces 24, which carry the bars 25, which are movable with respect to the said arms 24, which are prevented from improper movement and limited by guides 26, said bars carrying the flexible side pieces 27 and having one end of a spring 28 connected therewith, the opposite end of said spring being connected with the side arms 24 so that the said bars 25 are normally caused to be seated or retained against the lower wall of the guides 26. 29 designates clips carried by the handle bars 21 which have the pins 30 extending inwardly therefrom and which are adapted to enter a suitable slot 31 in said side bars 25 in order to hold the same in operative position, the springs 28 serving to hold the parts locked in their proper place.

Carried on the arms 15 are the ears 32, with which the back 33 is pivotally connected, said back having the spring-catch 34 at a suitable place thereon and having one end of a spring 35 connected therewith, the opposite end of said spring being connected with the locking bar 36, the said bar in the present instance being formed integral with the pins 18 carried in the ears 19 and which serve as a connection between the spring 17 and the arms 15 and also for the handle bars 21, it being noted that the said locking bar 36 is free to move and when raised will engage with the spring-catch 34 and hold the back in elevated position, the parts being best seen in Fig. 8.

37 designates a foot piece, which is suitably connected with the frame and with the seat plate 20 through the flexible connections 38 so that these parts are collapsible.

The operation of the device will be readily apparent. The parts being in the position seen in Fig. 1, the cart is ready for use but when it is desired to close the same this can be readily done in the following manner: By releasing the locking bar 36 from engagement with the spring-catch 34, the back 33 is lowered into the position seen in Figs. 3 and 4 and the locking bar is also lowered at the same time. By raising the side bars 25, in order to release the slots 31 from engagement with the pins 30, on the clips 39, the side arms can be turned inwardly and downwardly on the ears 23, the parts assuming the position seen in Figs. 3 and 4, after which the handle bars 21 can be turned inwardly, as well, these parts assuming the position seen in Figs. 3 and 4. By now removing the bars 12 from engagement with one of the side bars 7, this being accomplished by releasing the slot 13, as best seen in Fig. 5, the bars can be placed lengthwise of the cart after which by turning-in the bars 7 which carry the wheels 9 the parts will assume the position seen in Figs. 6 and 7 and the cart will be ready for carrying or shipping.

In order to place the parts in operative position the reversal of the operation just described takes place, that is to say, the wheels are turned outwardly by turning the bars 7 in the loops or journals 6 and the bars 12 are caused to engage with the bar 7 on the side of the cart opposite to that on which they are carried thus locking the wheels in position, the handle bars 21 are then raised and the side arms 24 will also be raised and the side bars 25 caused to reëngage with the pins 30 after which the back is elevated causing the locking bar 36 to again engage with the spring-catch 34, it being of course understood that when the running gear is turned-in the foot piece 37 is collapsible, as seen in Figs. 4, 6 and 7.

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

1. In a device of the character described, a frame, rods pivotally connected with each side of said frame and extending adjacent said frame, bent ends on said rods forming the axles for the wheels, and bars connected with one of said rods and adapted to engage with the rod on the opposite side when the parts are in operative position whereby the axles of the wheels are directly clamped.

2. In a device of the character described, a frame, rods pivotally connected with each side of said frame and extending adjacent said frame, bent ends on said rods forming the axles for the wheels, bars connected with one of said rods and adapted to engage with the rod on the opposite side when the parts are in operative position whereby the axles of the wheels are directly clamped, and stops at the front and back of said go-cart adapted to engage with said rods to prevent outward movement of the running gear.

3. In a device of the character described, a frame having side bars, rods pivotally connected with said side bars and extending adjacent said side bars bent outwardly and forming the axles for the wheels, bars con-

nected with one of said rods at the front and back of said go-cart and adapted to engage with the other rod at the front and back of said go-cart, stops engaging with said rods to prevent outward movement thereof and a collapsible foot piece carried by said frame.

4. In a device of the character described, a frame having side bars, arms connected at one end to said side bars, a curved spring connecting the opposite end of said side bars and said side arms and the curved portion of the springs extending rearwardly beyond the side bars, and a seat operatively carried by said arms.

5. In a device of the character described, a frame having side bars, arms connected at one end to said side bars, a curved spring supporting the opposite end of said arms and the curved portion of the springs extending rearwardly beyond the side bars, handle bars carried by said spring and collapsible side arms carried by said arm.

6. In a device of the character described, a frame having side bars, arms connected at one end to said side bars, curved springs supporting the opposite end of said bars and the curved portion of the springs extending rearwardly beyond the side bars, handle bars carried by said spring, collapsible side arms carried by said arms, and means for locking and holding said arms in operative position.

7. In a device of the character described, a frame having side bars, arms connected at one end thereof, curved springs supporting the opposite end of said arms and the curved portion of the springs extending rearwardly beyond the side bars, side pieces pivotally connected with said arms, a bar carried by said side pieces and movable thereon, handle bars carried by said spring, and means on said handle bars engaging with said side arms for locking the side pieces in proper position.

8. In a device of the character described, a frame having side bars, arms having one end connected therewith, a spring supporting the opposite end of said arms, handle bars carried by said spring, side pieces pivotally connected with said arms, side bars carried by said side pieces, guides for said side pieces, and pins carried by said handle bars adapted to engage with said side pieces for locking the parts in operative position.

9. In a device of the character described, a frame having side bars, arms having one end thereof rigidly connected with said side bars, curved springs supporting the opposite end of said bars and the curved portion of the springs extending rearwardly beyond the side bars, a back pivotally carried by said arms, a spring-catch on said back piece and a locking bar adapted to engage with said catch for locking the back in operative position.

10. In a device of the character described, a frame having side bars, arms having one end connected with said side bars, a spring supporting the opposite end of said bars, a back piece pivotally connected with said arms, a catch on said back, a locking bar adapted to engage with said catch for holding the back in position, said locking bar serving as a means for connecting the bars with said spring.

11. In a device of the character described, a frame having side bars, arms connected at one end thereof, a spring serving as a support for the opposite end of said arms, handle bars carried by said spring, side arm pieces pivotally connected with said bars, means for causing the side pieces to be engaged with said handle bars for locking the same in operative position, a back pivotally connected with said arms, and means for holding said back in operative position, said means serving as a support for the said spring and said handle bars.

RICHARD G. LEDIG.

Witnesses:
CHAS. W. RUETER,
WM. H. RUETER.