

1,057,314.

A. J. ADAMS.
GO-CART OR PERAMBULATOR.
APPLICATION FILED JUNE 10, 1912.

Patented Mar. 25, 1913.
3 SHEETS—SHEET 1.

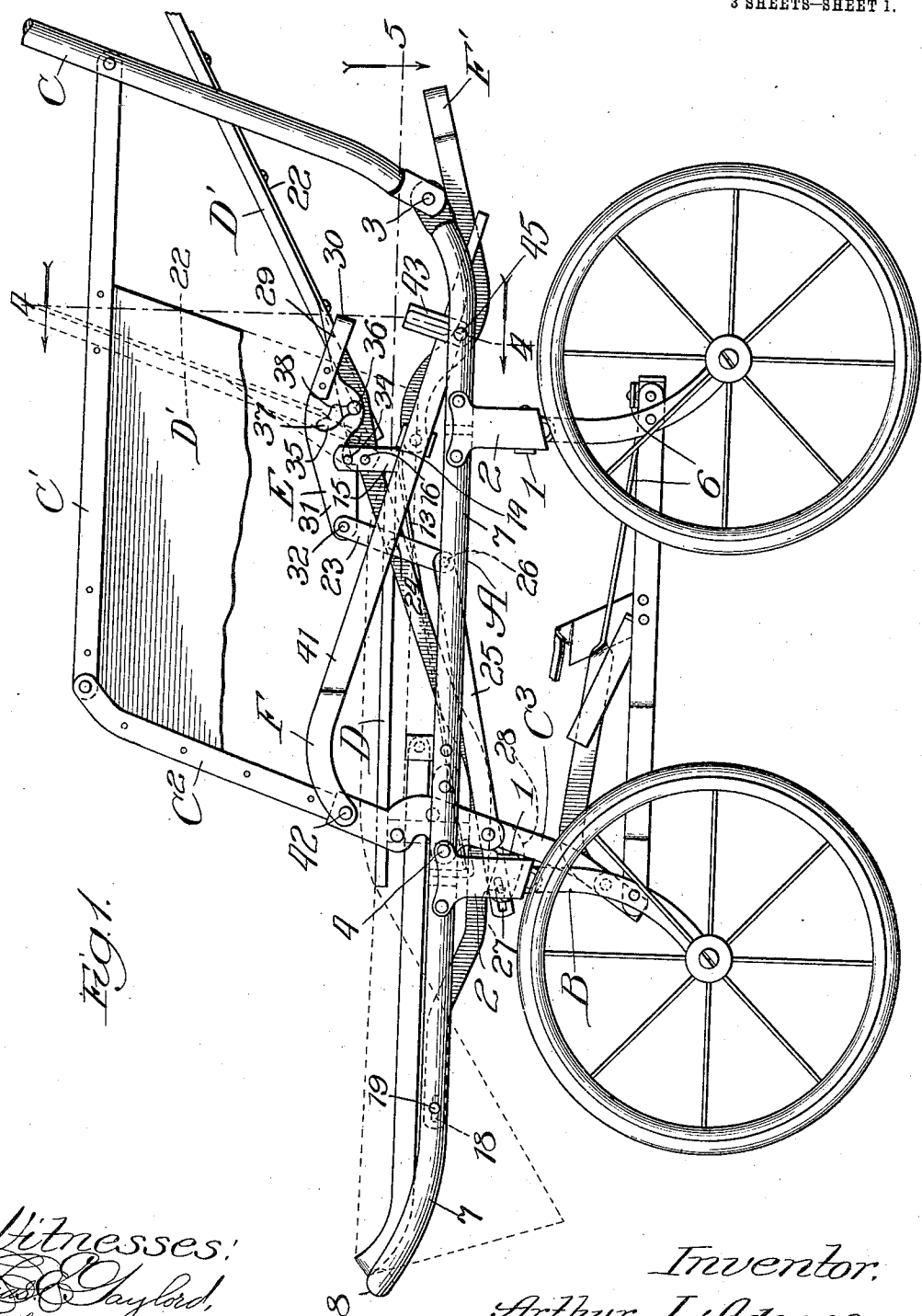


Fig. 1.

Witnesses:
[Signature]
G. F. Chase.

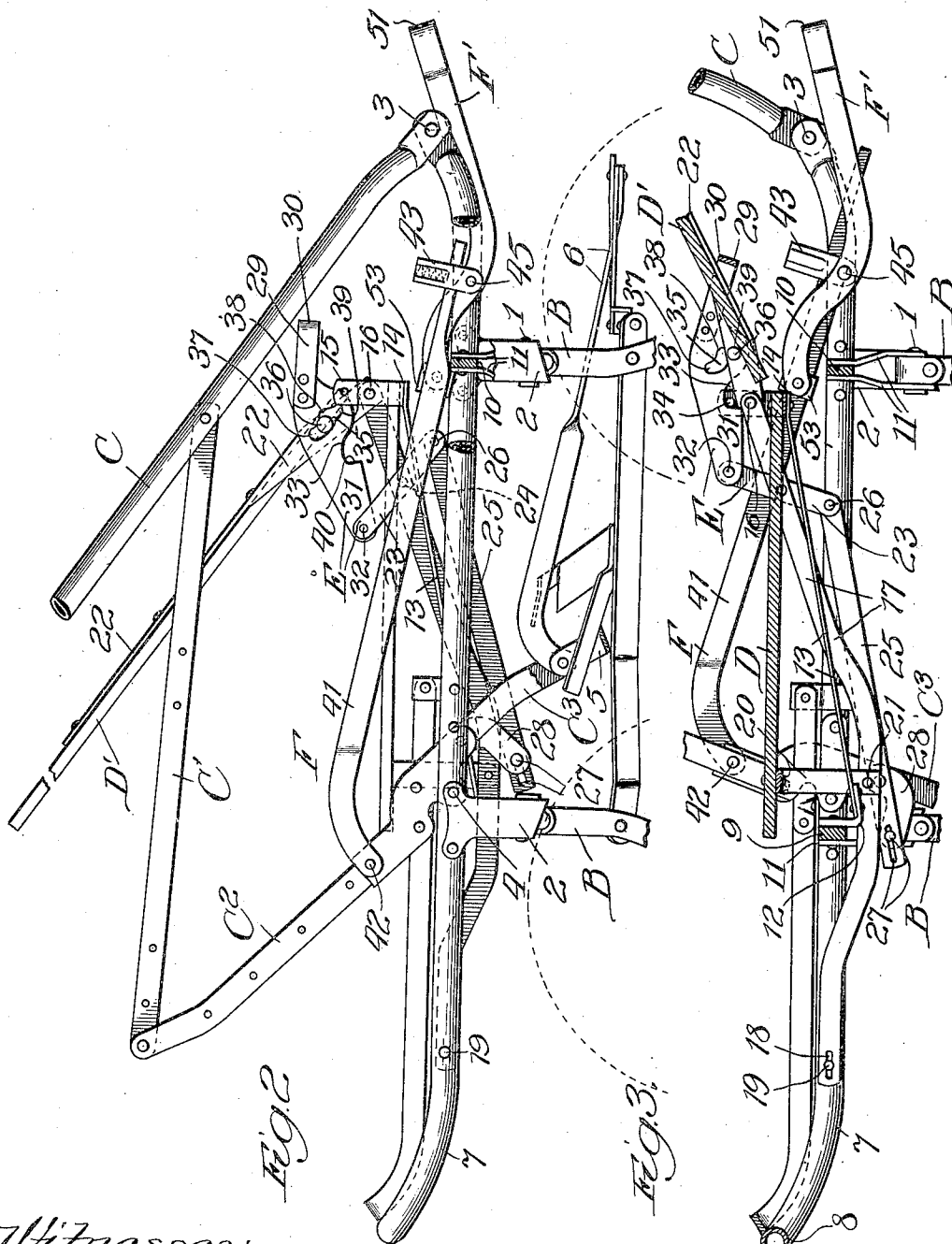
Inventor:
Arthur J. Adams,
By *[Signature]* *[Signature]*
Attys—

1,057,314.

A. J. ADAMS.
GO-CART OR PERAMBULATOR.
APPLICATION FILED JUNE 10, 1912.

Patented Mar. 25, 1913.

3 SHEETS—SHEET 2.



Witnesses:
Ed. C. Payford.
G. F. Chase.

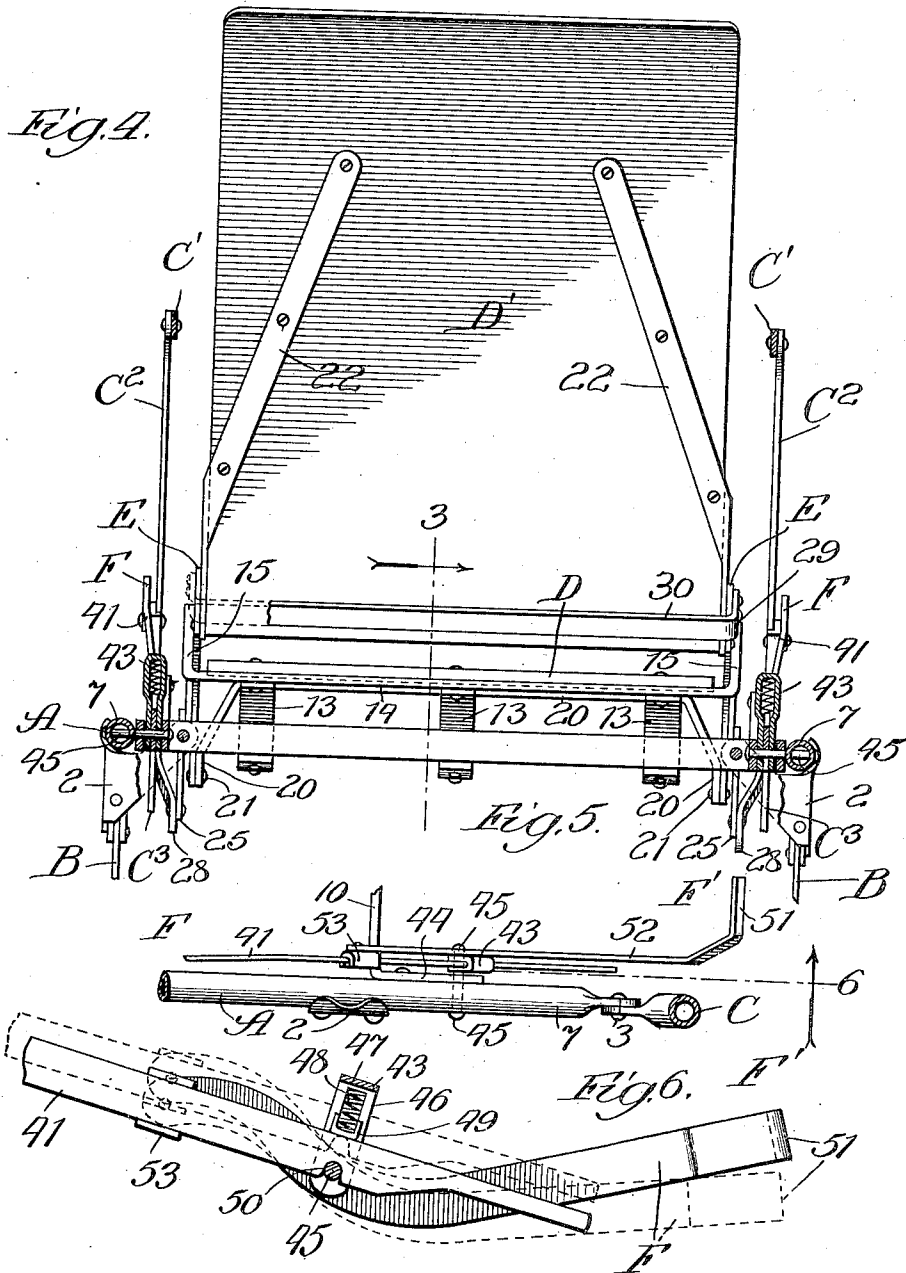
Inventor:
Arthur J. Adams,
By *Dymally, Lee, Christen & Wiles,*
ATTY'S.

A. J. ADAMS.
GO-CART OR PERAMBULATOR.
APPLICATION FILED JUNE 10, 1912.

1,057,314.

Patented Mar. 25, 1913.

3 SHEETS—SHEET 3.



Witnesses:
E. C. Gaylord,
G. F. Chase.

Inventor:
Arthur J. Adams,
By Dyrenforth, Lee, Chittenden & Wiles
Attys.

UNITED STATES PATENT OFFICE.

ARTHUR J. ADAMS, OF CHICAGO, ILLINOIS, ASSIGNOR TO FULTON MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

GO-CART OR PERAMBULATOR.

Specification of Letters Patent. Patented Mar. 25, 1913.

1,057,314.

Original application filed September 6, 1910, Serial No. 580,467. Divided and this application filed June 10, 1912. Serial No. 702,705.

To all whom it may concern:

Be it known that I, ARTHUR J. ADAMS, a citizen of the United States, residing at Chicago; in the county of Cook and State of Illinois, have invented a new and useful Improvement in Go-Carts or Perambulators, of which the following is a specification.

My invention relates particularly to means for locking the superstructure of folding go-carts or perambulators; and my primary object is to provide an improved and simplified locking device of the character indicated which will effectually serve its purpose and which may be operated with the greatest facility, leaving the manipulator free to effect the folding of the go-cart structure without being hampered by any difficulty in effecting a release of the locking device.

The present application forms a division of my application Serial No. 580,467, filed September 6, 1910.

To facilitate complete understanding of the invention, it is here illustrated as embodied in a go-cart structure of the form shown in my above-designated application; but it will be understood that the invention may be employed in connection with any folding go-cart structure to which it may be adapted.

Referring to the accompanying drawings—Figure 1 represents a broken side elevational view of a folding go-cart embodying my invention; Fig. 2, a broken side elevational view of the same, showing the structure in the partially collapsed position; Fig. 3, a broken longitudinal section, the section being taken as indicated at line 3 of Fig. 4; Fig. 4, a broken transverse section taken as indicated at line 4 of Fig. 1; Fig. 5, a broken sectional view taken as indicated at line 5 of Fig. 1 and showing portions of the improved structure-locking mechanism and releasing means associated therewith; and Fig. 6, a section taken as indicated at line 6 of Fig. 5.

In the construction illustrated, A represents a running-gear frame; B, wheel-forks, or wheel-supports, connected by pivots 1 to fixedly secured brackets 2 carried by the side-members of the running-gear frame, said wheel-supports being adapted to fold inwardly in pairs transversely beneath the

running-gear frame; C, a handle having its side members connected at their lower ends by pivots 3 to the rear portions of the side-members of the running-gear frame; C', arms pivotally connected at their rear ends with the side members of the handle and pivotally joined at their front ends to the upper ends of arms, or links, C², which are joined, by pivots 4, to the running-gear frame; C³, a U-shaped member which has its upturned arms rigidly connected with the links, or members, C², and which has a cross-member, or web, 5 with which is connected mechanism 6, which serves to automatically fold and unfold the wheels with relation to the running-gear frame when the superstructure is folded and unfolded; D, a seat which is mounted, preferably resiliently, on the running-gear frame; D', a back pivotally connected with the seat; E, back-folding and adjusting mechanism connected with the seat, and also connected with the folding superstructure of the cart; F, my improved locking mechanism for the go-cart structure; and F', releasing means associated with said locking mechanism.

The running-gear frame A may be of any suitable construction. As shown, it is composed of side-members 7 formed integrally with a front cross-member 8; and cross-bars 9 and 10 connecting the side-members 7 in the vicinity of the front and rear wheel-supports, respectively. The fixedly-secured bracket-members 2 which are attached to the side-members 7 of the running-gear frame are strengthened by means of braces 11 which connect them with the cross-members 9 and 10.

The wheel-supports, or wheel-forks, may be of any desired construction. They are usually connected together in pairs at the opposite sides of the go-cart and adapted to fold transversely inwardly beneath the running-gear frame.

The handle C may be of any approved construction. It usually comprises side-bars and a cross-round (not shown) connecting the upper ends of the side-bars. The manner in which the handle and other portions of the superstructure fold with relation to the running-gear frame and in such folding operation operate to automatically fold the wheels beneath the running-gear frame through the medium of the mechanism 6, is

fully explained in my pending application No. 546,926, filed March 2, 1910. In its folding operation, the U-shaped member C³ swings rearwardly, as illustrated in Fig. 2.

5 The manner in which the seat D is resiliently mounted on the running-gear frame is explained and claimed in my application No. 580,468, filed September 6, 1910. In order that the present invention may be
10 fully understood, however, it is desirable that the manner of mounting the seat shall be herein explained.

The cross-member 9 of the running-gear frame is equipped with depending bracket-
15 members 12 to which are rigidly secured the front ends of leaf-springs 13 which extend rearwardly and upwardly and support at their rear ends a cross-bar 14 having up-
20 turned ends, or arms, 15. Connected at their rear ends with the arms 15, by means of pivots 16, are levers, or links, 17 whose rear portions flank the rear portion of the seat, said levers extending forwardly and being offset downwardly edgewise so as to
25 extend beneath the cross-bar 9 of the running-gear frame, the front ends of the levers being provided with slots 18 which receive headed studs 19 carried by the front por-
30 tions of the side-members 7 of the running-gear frame, said studs projecting inwardly from said side-members. Mounted on the intermediate portions of the supporting levers 17 is a U-shaped seat-support 20 whose downturned arms are secured by
35 rivets 21 to said levers 17, and whose web or cross-member supports the front portion of the seat. It will be understood from the foregoing that the springs 13 support the rear portion of the seat, that the levers 17
40 are carried partially by the springs 13 and partially by the front portion of the running-gear frame, and that the front portion of the seat is mounted on the levers 17 through the medium of the member 20.
45 Thus, the seat is supported in a manner to afford the fullest spring action, or resiliency, and this result is accomplished without interfering with the folding action of the go-cart structure.

50 The back D' is equipped with straps, or hinge-members, 22 which are connected with the pivots 16 carried by the arms 15 rising from the rear portion of the seat.

The mechanism E which serves to adjust
55 the seat in any of the three positions desired, and also to automatically fold the seat in the operation of folding the go-cart structure, comprises a pair of levers 23 connected by pivots 24 with the seat-supporting levers
60 17 some distance in front of the pivots 16; links 25 connected at their rear ends, by pivots 26, with the lower ends of the levers 23 and joined at their front ends by pin-and-slot connections 27 to arms 28 carried
65 by the arms of the wheel-folding lever C³;

and a U-shaped member 29 having a web 30 located in the rear of the back and having forwardly-extending arms 31 connected by pivots 32 to the upper ends of the levers 23, said member 29 serving as a means for
70 adjusting the back in either the standing, half-reclining, or full-reclining position, according to desire. The arms 31 are provided at their lower edges with recesses, or
75 notches, 33 which engage or rest on studs 34 with which the arms 15 rising from the rear portion of the seat are equipped. The arms 31 of the member 29 are also provided with irregular shaped slots 35 which re-
80 ceive studs 36 carried by the hinge-members 22 of the back. The slots 35 are provided with offsets 37, 38 and 39, which correspond respectively with the standing, half-reclin-
85 ing and full-reclining position of the back. It will be observed that the pin-and-slot connections 27 permit these adjustments to be made. It will also be observed that when the
90 superstructure of the go-cart is being folded, the wheel-folding member C³ is thrown rearwardly, thereby forcing the links 25 rear-
95 wardly, and thus, through the medium of the levers 23, drawing the back-supporting bail 29 forwardly and causing the back to be folded forwardly with relation to the seat and running-gear frame. In this op-
100 eration, the curved or beveled walls of the notches, or recesses, 33 ride on the studs 34, as will be understood by comparing Fig. 2 with Fig. 3. In the reverse operation, the arms of the back-supporting bail 29 ride
105 on the studs 34 until the abrupt holders 40 of the recesses 33 engage the studs 34.

The improved mechanism F for locking the go-cart structure in the open position
110 comprises a pair of locking-bars 41 having downwardly curved front ends connected by pivots 42 with the arms or links C² some distance above the pivots 4; and guides 43 carried by the rear portions of the side-mem-
115 bers 7 of the running-gear frame, as shown in detail in Figs. 5 and 6. As shown in Fig. 5, the cross-member 10 of the running-gear frame has rearwardly turned ends 44 which are riveted to the side-bars of the running-
120 gear frame, and the rear rivets 45 project inwardly beyond the rearwardly turned arms 44 and afford studs on which the guides 43 are mounted. Each guide 43 com-
125 prises a U-shaped clip having downturned arms 46 and a web, or top-member, 47. Each clip houses a spring 48 which bears against a follower 49 which rests against the upper edge of the corresponding locking-bar 41. The stud 45 affords a locking-shoulder which co-acts with a locking-notch 50 with
130 which the lower edge of the locking-bar is provided.

The releasing means F' associated with the locking mechanism F comprises a U-
135 shaped lever having a cross-member, or web,

51 and forwardly-extending arms 52 which project some distance in front of the studs 45 and are equipped with clips, or slides, 53 which engage the locking-bars 41 some distance in front of the guides 43. It will now be understood that when the rear end of the U-shaped lever F' is depressed, as may be done by foot-pressure, the rear ends of the locking-bars F will be elevated, thereby disengaging the locking-notches 50 from the locking-studs 45, thus enabling the handle of the go-cart to be swung forwardly, in which operation the go-cart structure will be collapsed. In this operation, the back will be folded forwardly upon the seat, and in the reverse operation, the back will be elevated to a standing position.

The improved locking and releasing means herein described and claimed may be applied to any go-cart having a folding superstructure of a character permitting the application or adaptation of my invention thereto. Hence, I desire to be understood as intending no unnecessary limitation by the illustration of the invention in connection with a selected form of folding carriage.

What I regard as new and desire to secure by Letters Patent is—

1. In a structure of the character set forth, the combination of a running-gear frame, a handle pivotally connected to the rear portion thereof and adapted to fold forwardly thereon, arms connected with said handle, links connecting the front ends of said arms with the running-gear frame, a seat, locking-bars connected with said links near the running-gear frame, guides carried by the rear portion of the running-gear frame and receiving the rear ends of said locking-bars, said guides having locking-shoulders thereat, and a releasing member

having pivotally supported arms with forward extensions slidably engaging said locking-bars.

2. In a structure of the character set forth, the combination of a running-gear frame, a handle pivotally connected to the rear portion thereof and adapted to fold forwardly thereon, arms connected with said handle, links connecting the front ends of said arms with the running-gear frame, a seat, locking-bars connected with said links near the running-gear frame, guides carried by the rear portions of the side-members of the running-gear frame and receiving said locking-bars, said guides equipped with locking-studs, and a U-shaped releasing-member having its arms pivoted at said guides and provided with forward extensions equipped with slides engaging said locking-bars.

3. In a structure of the character set forth, having a running-gear frame and a folding superstructure, including a forwardly swinging handle, locking and releasing means for said superstructure, comprising locking-bars connected at their front ends with the front portion of the folding superstructure, guides carried by the rear portion of the running-gear frame and receiving the rear ends of said locking-bars, locking-shoulders associated with said guides, and a releasing member having arms pivotally supported on the running-gear frame and provided with forward extensions engaging said locking-bars, said releasing member having a cross-piece joining the rear portions of said arms.

ARTHUR J. ADAMS.

In presence of—

J. G. ANDERSON,
R. A. SCHAEFER.