A. W. LOSHBOUGH.

FOLDING CARRIAGE.

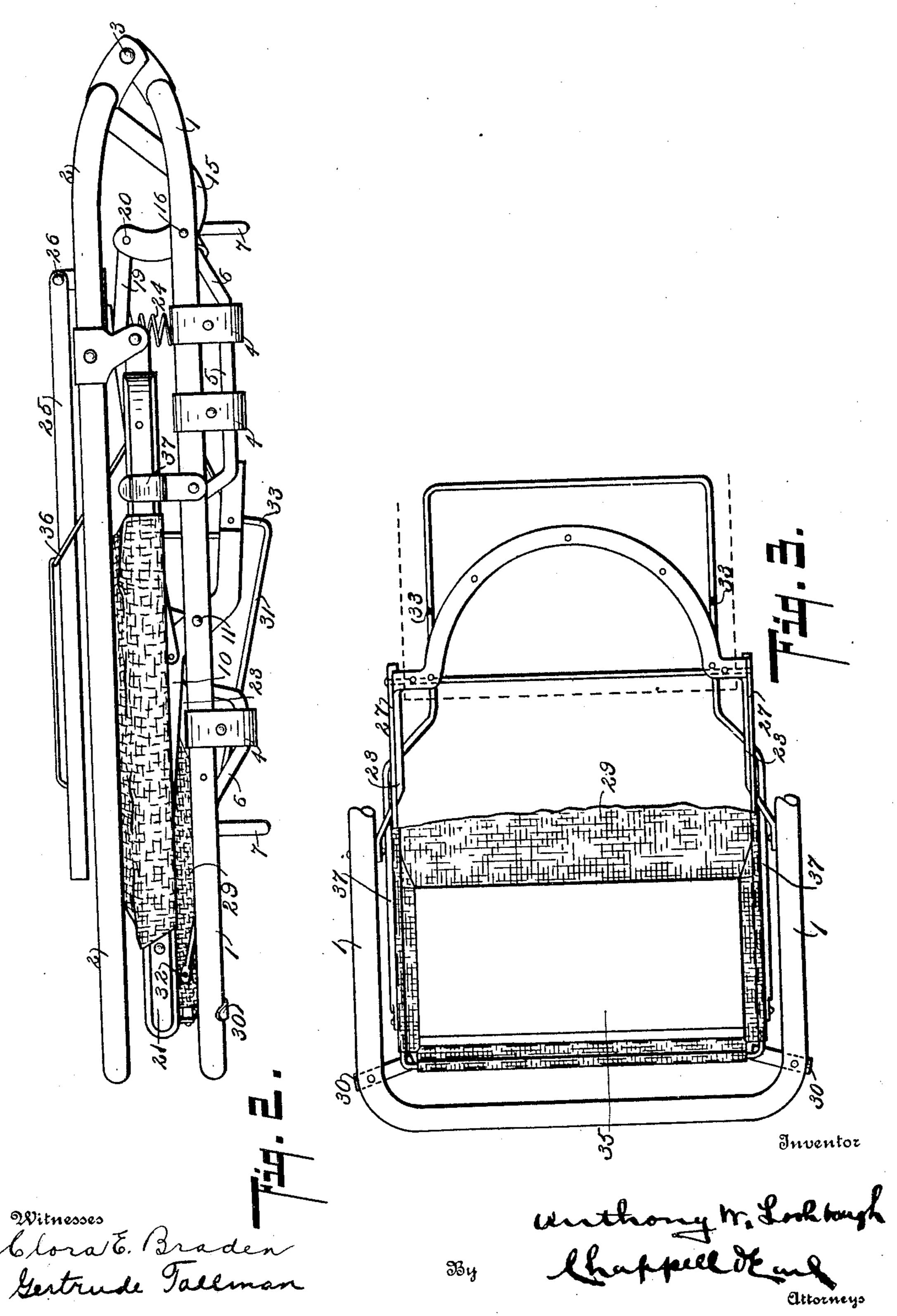
APPLICATION FILED AUG. 28, 1908.

Patented July 13, 1909. 927,567. 3 SHEETS—SHEET 1. Witnesses Blora E. Braden Getteete Tollman

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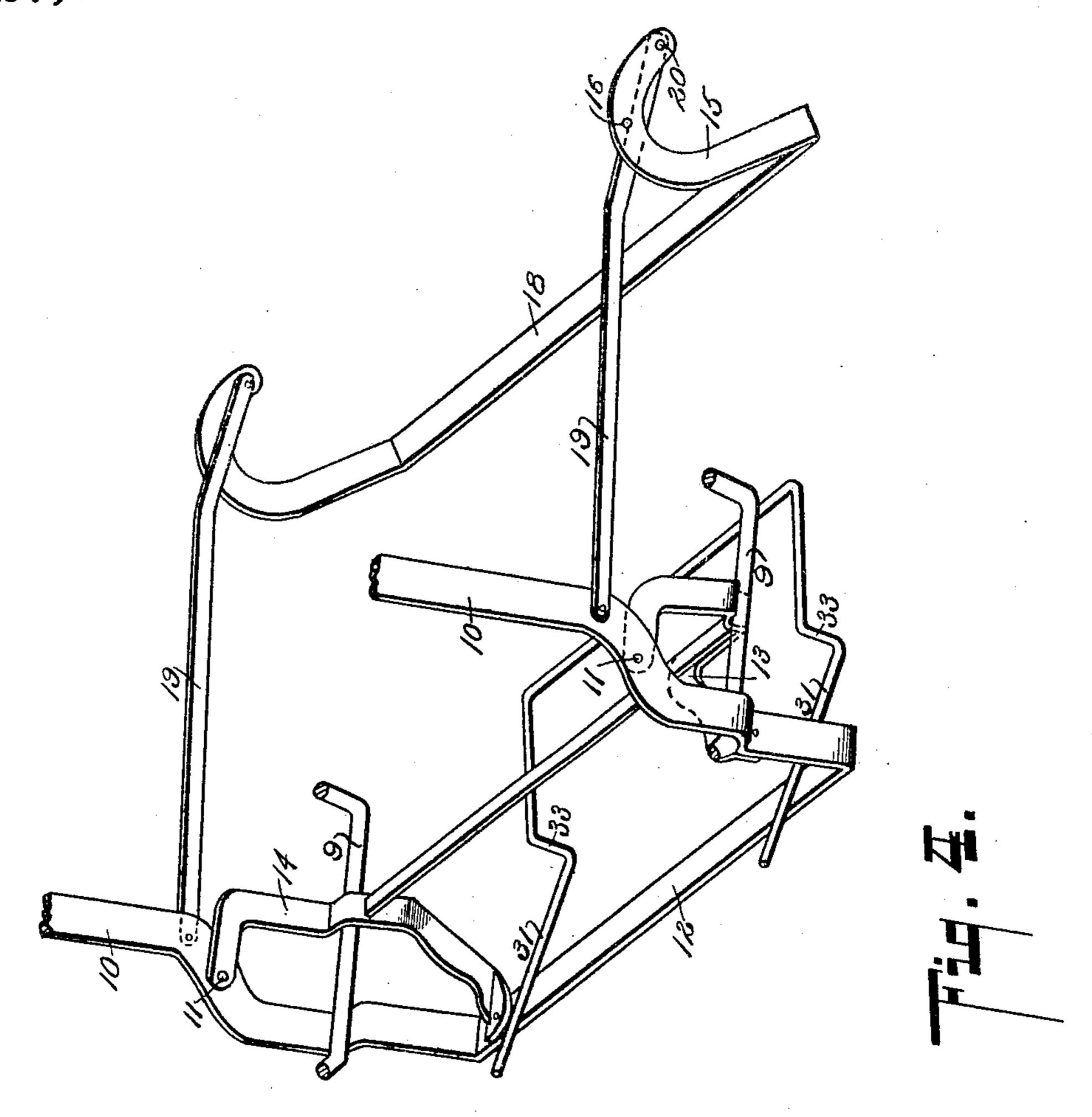
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Inventor

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By

Attorneys

UNITED STATES PATENT OFFICE.

ANTHONY W. LOSHBOUGH, OF DETROIT, MICHIGAN, ASSIGNOR TO THE STURGIS STEEL GO-CART COMPANY, OF STURGIS, MICHIGAN.

FOLDING CARRIAGE.

No. 927.567.

Specification of Letters Patent.

Patented July 13, 1909.

Application filed August 28, 1908. Serial No. 450,779.

To all whom it may concern:

Be it known that I, Anthony W. Losh-BOUGH, a citizen of the United States, residing at the city of Detroit, county of Wayne, 5 State of Michigan, have invented certain new and useful Improvements in Folding Carriages, of which the following is a specification.

This invention relates to improvements in

10 folding carriages.

It relates particularly to improvements in folding carriages of the type or general structure shown in my application for Letters Patent, filed November 5, 1907, Serial 15 No. 400,782, and I have shown my improvements embodied in such a structure, although it is capable of use in other structures.

The main object of this invention is, to 20 provide in a folding callapsible carriage an improved foot rest, which is automatically collapsed upon the folding of the carriage.

Further objects, and objects relating to structural details, will definitely appear 25 from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and point-

30 ed out in the claims.

A structure embodying the features of my invention is clearly illustrated in the accompanying drawing, forming a part of

this specification, in which,

35 - Figure 1 is a side elevation of a structure embodying the features of my invention, a portion of the back, foot rest and handle being broken away and the wheels on one side removed, the adjustment of the foot rest being indicated by dotted lines. Fig. 2 is a side elevation of the structure collapsed, the wheels being removed. Fig. 3 is a detail plan of the forward end of the running-gear frame, the foot rest, and of the seat support-45 ing bracket for the forward end of the seat, the seat being indicated by dotted lines. Fig. 4 is a detail perspective view of the means for supporting the foot rest in its elevated position.

In the drawing, similar numerals of reference refer to similar parts throughout the

several views.

Referring to the drawing, I represents the running-gear frame, which is preferably | the thrust on the wheels, which would tend

into a U-shape. The handle 2 is pivotally secured to the rear ends of the side bars of the running-gear frame by means of the pivots 3. On each side of the side bars of the running-gear frame are clip-like hang- 60 ers 4 for the wheel supports 5. The wheel supports 5 are preferably formed of rods having downwardly-projecting wheel-carrying arms 6 provided with suitable journals 7 for the wheels 8. The wheel supports are 65 pivotally supported on the hangers, so that they are free to swing therein to permit the wheels being folded upon each other under the running-gear frame.

The wheel supports 5 are provided with 70 offsets forming crank-like arms 9, which are preferably inclined downwardly and slightly inwardly toward the rear, as clearly appears

from the drawing.

A pair of levers 10 is mounted on the side 75 bars of the running-gear frame by means of the pivots 11, the pivots being located above. the offsets of the wheel supports. The lower ends of the levers project downwardly below and preferably on the outside of the 80 arms 9 of the wheel supports. The lower ends of the levers are connected by a cross piece 12, the crosspiece and levers being, in the structure illustrated, formed of one piece of material.

On the lower ends of the levers and arranged to embrace the arms 9 of the wheel hangers are cam loops 13 and 14. These cam loops are so shaped and coact with the levers 10, that, when the levers are actuated, 90 the wheel supports are swung in or out to collapse or erect them. To accomplish this, the loops are shaped so that they have a

cam action on the arms.

The levers 10 are locked in their erected 95 position and the wheel supports further braced by means of the braces 15, which are pivoted on the running-gear frame at 16. The arms 6 of the wheel supports are provided with fork-like clips 17, adapted to re- 100 ceive these braces 15, when the wheel supports are in their erected or extended position. The lower ends of the wheel support braces are preferably connected by a crosspiece 18, which adds materially to their 105 rigidity and efficiency as braces, it being obvious that, when the wheel supports are erected and the braces engaged therewith, 55 formed of a piece of tubular material bent to collapse or spread them, is sustained 110

largely by means of this cross piece. The upper ends of the braces 15 are preferably curved rearwardly and downwardly beyond the pivots 16 therefor and are connected by 5 the links 19 to the wheel support actuating levers 10. These links are so arranged that, when the braces 15 are in position to engage the wheel supports, the pivot connections 20 for the links to the braces are thrown below 10 or past the center of the pivots 16 for the braces to the running-gear frame, so that they serve as an effective lock for the levers 10, thus securely locking the carriage in its open or erected position, and also bracing

15 the wheel supports.

The cross piece 18, is, as will be noted, at the rear of the carriage, so tat it may be engaged by the foot of the operator to release the braces or push them into engaging 20 position, thus making the device very easy and convenient to operate. The levers 10 are preferably connected at their upper ends by means of the bars or links 21 to the handles 2, so that, when the handles are col-25 lapsed over upon the running-gear frame—as illustrated in Fig. 2—the wheel supports are automatically folded; and, when the handle is extended or lifted up—as illustrated in Fig. 1—the wheels are automatically erected. 30 These links or bars 21 also serve as the side bars for the seat 22. The seat 22 is supported at its forward end by means of the bracket 23, which is secured by means of the pivots 30 to the side bars of the running-gear 35 frame. The seat springs 24 are arranged at the rear of the seat. The seat back 25 is pivoted at 26 to the seat.

In collapsing the carriage, the back folds over upon the seat and the side bars and the 40 handle fold down at the sides of the back

and seat—see Fig. 3.

My improved foot rest preferably comprises a supporting frame 27 pivoted at 28 on the seat supporting bracket 23, the frame 45 being preferably bail-like in shape—see Figs. 1 and 3. The body 29 of the foot rest is formed of flexible fabric, and is suspended from this frame.

The foot rest is supported normally on 50 the rests 30 provided therefor on the running-gear frame, the rests being arranged to engage the forward corners of the foot rest frame—see Fig. 3. To support the frame in an elevated position, I provide the same 55 with a supporting brace 31 which is pivoted at 32 on the foot rest frame and provided . with an offset 33 arranged to engaged over the cross piece 12 for the lower ends of the levers 10, in which position the foot rest is 60 held in the position indicated by the dotted lines in Fig. 1. The foot rest is provided with a foot rail 34 at its forward end, on which the feet of the child may be placed. This also serves as a guard for the running-65 gear frame, preventing the placing of the

feet thereon, which would, of course, be likely to mar the finish thereof. When the foot rest is supported in the position indicated by dotted lines, the foot board 35 thereof is substantially in alinement with 70 the seat, thereby effectively supporting the feet of the child when reclining in the car-

rlage. The back 25 is supported by a pivoted link 36, so that it may be adjusted to bring 75 the same to the position shown in Fig. 1, or into a reclining position, thus coacting with the foot rest in adapting the structure to the requirements of the child. When the structure is collapsed, the side bars 21 are 80 engaged by the springs 37, which project upwardly from the side bars of the runninggear frame, holding the structure in the collapsed position,—that is, the springs retain the parts in the collapsed position, unless 85 more than ordinary stress is placed thereon, so that the collapsed structure may be car-

ried by the handles. When it is desired to erect the structure, it is only necessary to grasp the handle and 90 forward end of the running-gear frame and pull them apart, which swings all of the parts to their erected position, when, by pressing forwardly on the braces 15, they are engaged with the wheel supports, and, 95 at the same time, the parts are automatically locked so that they cannot collapse.

The structure may be collapsed while the foot rest is in its elevated position as the cross piece 12, by which the brace 31 is sup- 100 ported, swings rearwardly away from the rests 33 on the brace, thereby lowering or collapsing the foot rest upon the rests 30. The body of the foot rest being of flexible. material is swung up or lifted by the wheels, 105 so that it does not in any wise interfere with the folding thereof.

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

1. In a structure of the class described, the combination with the running-gear frame, of collapsible wheel supports; levers for collapsing and erecting said wheel supports projecting below said running-gear 115 frame, said levers having a cross piece on their lower ends, a seat; a supporting bracket therefor pivotally mounted on said frame; a foot rest comprising a frame pivoted at its rear end upon said seat supporting bracket; 120 rests on said running-gear frame for the forward end of said foot rest; a foot rail on the forward end of said foot rest frame projecting above said running-gear frame; and a support for holding said foot rest in 125 an elevated position pivoted thereon and adapted to rest on said cross piece on said levers, said support having rests thereon adapted to be engaged on said crosspiece.

2. In a structure of the class described, 150

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the combination with the running-gear frame, of collapsible wheel supports; levers for collapsing and erecting said wheel supports projecting below said running-gear 5 frame, said levers having a cross piece on their lower ends; a seat; a supporting bracket therefor pivotally mounted on said frame; a foot rest comprising a frame pivoted at its rear end upon said seat supporting bracket; 10 rests on said running-gear frame for the forward end of said foot rest; and a support for holding said 1 ot rest in an elevated position, pivoted thereon and adapted to rest on said crosspiece on said levers, said sup-15 port having rests thereon adapted to be engaged on said crosspiece.

3. In a structure of the class described, the combination with the running-gear frame, of collapsible wheel supports; levers 20 for collapsing and erecting said wheel supports projecting below said running-gear frame, said levers having a crosspiece on their lower ends; a foot rest comprising a pivoted frame; rests on said running-gear 25 frame for the forward end of said foot rest; a foot rail on the forward end of said foot rest frame projecting above said runninggear frame; and a support for holding said foot rest in an elevated position pivoted 30 thereon and adapted to rest on said cross piece on said levers, said support having rests thereon adapted to be engaged on said

4. In a structure of the class described, the combination with the running-gear frame, of collapsible wheel supports; levers for collapsing and erecting said wheel supports projecting below said running-gear frame, said levers having a crosspiece on

crosspiece.

their lower ends; a foot rest comprising 40 a pivoted frame; rests on said running-gear frame for the forward end of said foot rest; and a support for holding said foot rest in an elevated position pivoted thereon and adapted to rest on said cross piece on said 45 levers, said support having rests thereon adapted to be engaged on said cross piece.

5. In a structure of the class described, the combination with the running-gear frame, of collapsible wheel supports; levers 50 for collapsing and erecting said wheel supports; an adjustable foot rest; rests on said running-gear frame for said foot rest; and a support for holding said foot rest in an elevated position carried by said levers. 55

6. In a structure of the class described, the combination with the running-gear frame, of collapsible wheel supports; levers for collapsing and erecting said wheel supports; an adjustable foot rest; and a sup- 60 port for said foot rest carried by said levers.

7. In a structure of the class described, the combination with the running-gear frame, of a foot rest comprising a bail-like frame pivotally connected at its rear end 65 to said running-gear frame; a flexible body for said foot rest carried by said frame; rests on said running-gear frame for the forward end of said foot rest; and an adjustable support for holding said foot rest in an 70 elevated position.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

nesses.

Witnesses:

HENRY B. GRAVES, JAMES H. RUSSELL, Jr.

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