(No Model.) 4 Sheets—Sheet 1.

W. J. MELLOR.

RAILWAY TRICYCLE.

No. 550,520. Patented Nov. 26, 1895.

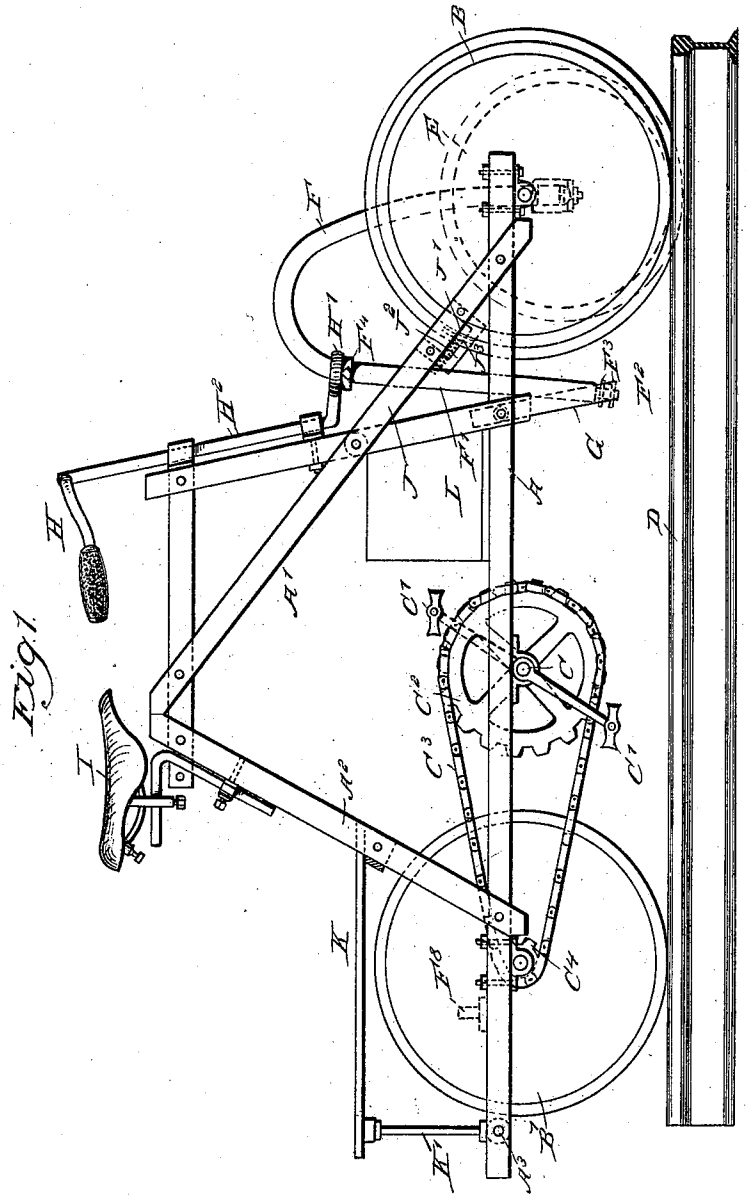

Fig. 1.

WITNESSES:

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Geo. J. Rockett, Jr.

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W. J. MELLOR.

RAILWAY TRICYCLE.

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Fig. 3.

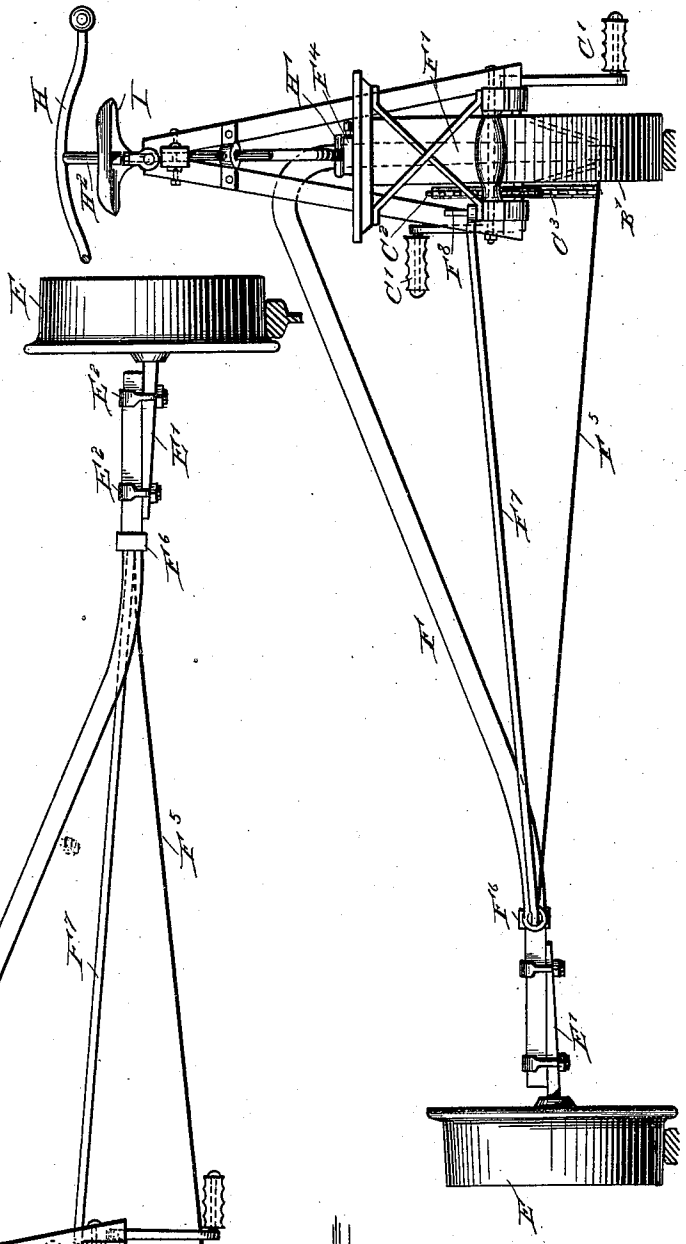
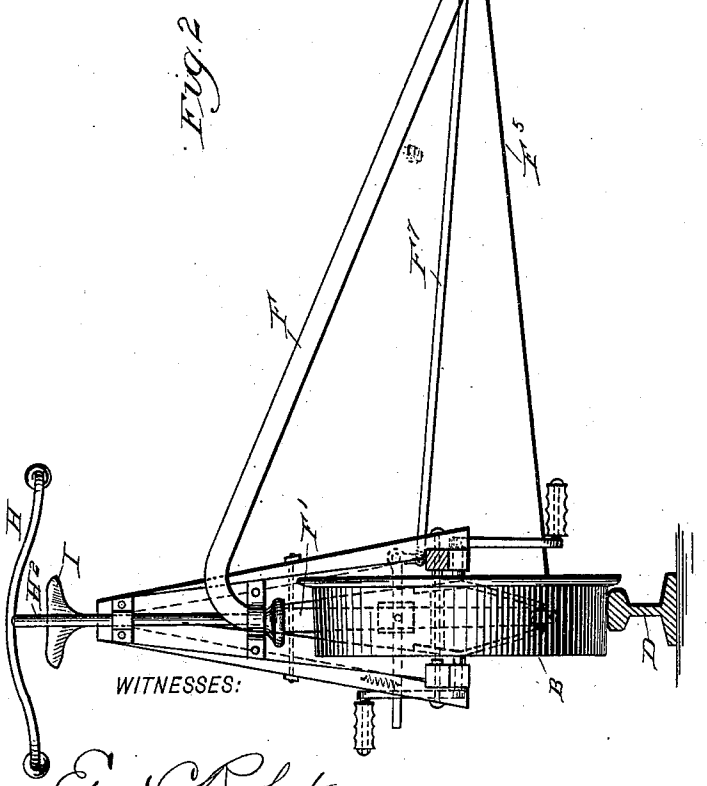


Fig. 2.



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(No Model.) 4 Sheets—Sheet 3.

W. J. MELLOR.

RAILWAY TRICYCLE.

No. 550,520. Patented Nov. 26, 1895.

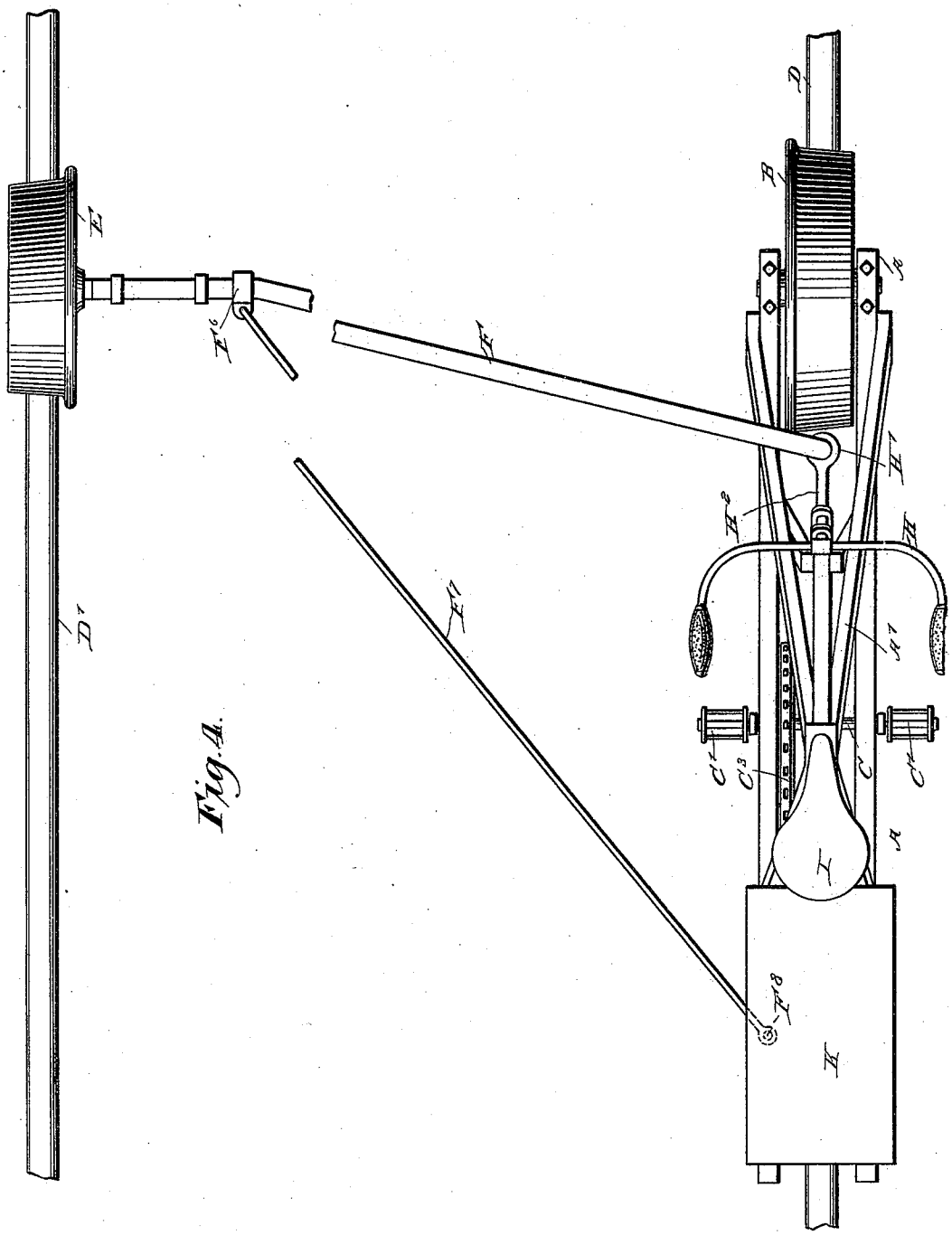

Fig. 4.

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W. J. MELLOR.

RAILWAY TRICYCLE.

No. 550,520. Patented Nov. 26, 1895.

Fig. 5.

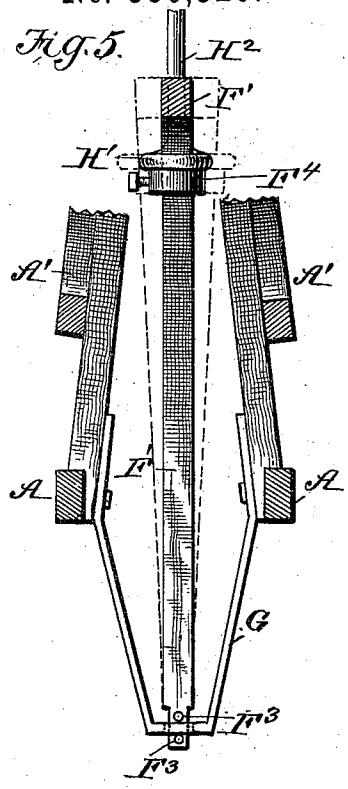


Fig. 6.

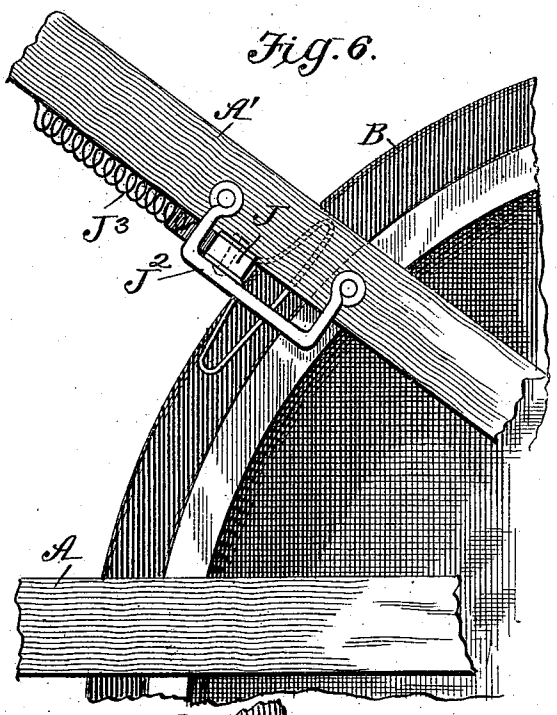
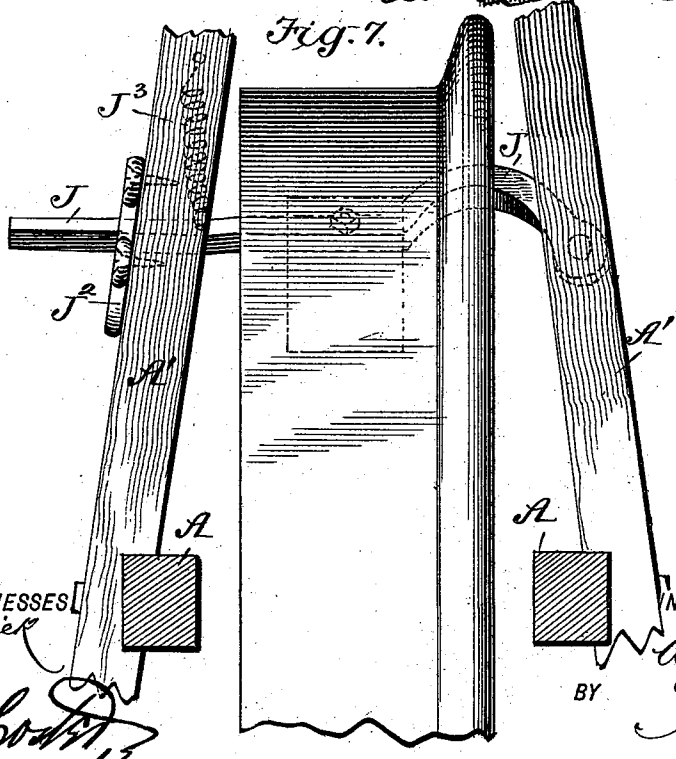


Fig. 7.



WITNESSES

C. Sedgwick

Rud. J. Hoodt

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Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM J. MELLOR, OF LOZIER, TEXAS.

RAILWAY-TRICYCLE.

SPECIFICATION forming part of Letters Patent No. 550,520, dated November 26, 1895.

Application filed June 27, 1895. Serial No. 554,251. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. MELLOR, of Lozier, in the county of Pecos and State of Texas, have invented a new and Improved Railway-Tricycle, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved railway-tricycle which is simple and durable in construction and adapted to carry one or more persons, and also tools for repairing electric lines and railway tracks, and various other railway fixtures and appliances.

The invention consists, principally, of a frame carrying a front and a rear wheel, a cross-bar mounted to swing on the said frame and carrying a guide-wheel for the second rail, and a handle-bar connected with the said cross-bar to manipulate the latter.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement. Fig. 2 is a front end elevation of the same. Fig. 3 is a rear end elevation of the same. Fig. 4 is a plan view of the same. Fig. 5 is a detail sectional view on line 5 5, Fig. 1, looking in the direction of the arrow. Figs. 6 and 7 are detail views showing the brake mechanism.

The improved tricycle is provided with a suitably-constructed frame A, in which are journaled the front and rear wheels B B′, of which the former is flanged and the latter is without a flange, as plainly indicated in the drawings. On the frame A, between the wheels B B′, is journaled a crank or pedal shaft C, carrying the pedals C′ and a sprocket-wheel C^2, which latter is connected by a sprocket-chain C^3 with a sprocket-wheel C^4 on the shaft for the rear wheel B′. The front and rear wheels B B′ travel on one track-rail D, while the other track-rail D′ is engaged by a flanged guide-wheel E, journaled on a short axle E′, clipped or otherwise fastened at E^2 to a transversely-extending bar F, formed with a vertically-disposed post F′, having its lower reduced end F^2 journaled in the middle portion of a U-shaped bracket G, attached to the frame A directly in the rear of the wheel B. The guide-wheel E is located directly opposite the wheel B, and consequently the bar F stands obliquely to the frame A during the time the tricycle is in use. The reduced portion F^2 of the post F′ is held in place by two keys F^3, engaging the said reduced portion above and below the middle part of the bracket G, so as to prevent accidental disconnection of the reduced part from the seat in the bracket G, and yet at the same time form a loose connection which will allow the post F to be moved at its upper end toward either side of the frame.

On the upper part of the post F′ is held adjustable by a set-screw a collar F^4, on which rests an eye H′, engaging the said post and formed on a rod H^2, carrying the handle-bar H, to be taken hold of by the operator seated on the seat I, attached to the upper triangular part of the frame. The collar F^4 is adjustable on post F to raise or lower the handle to suit the rider. From the lower end of the reduced portion F^2 a connecting-rod F^5 extends to an eye F^6, attached to the cross-bar F, as plainly indicated in the drawings, so as to stiffen the said cross-bar F. A brace F^7 is connected with the eye F^6 and extends rearwardly to a pin F^8, attached to the frame A on the inner side of the wheel B′, as plainly indicated in the drawings. Now it will be seen that when this brace F^7 is unhooked from the pin F^8 then the operator by turning the handle-bar H can impart a swinging motion to the cross-bar F, so as to fold the latter alongside the frame A, with the wheel B extending in the rear of the wheel B′. Thus if the tricycle is not in use the cross-bar F with its guide-wheel E can be folded upon the frame, so that the machine takes up very little room and can be conveniently moved about from and to the railroad-track. The brace F^7 is folded to cross-bar F, when both the brace and cross-bar are folded to the frame A. The cross-bar F is not necessarily handled by handle-bar H only to fold.

A brake is arranged on the front part A′ of the frame A in rear of the wheel B, said brake comprising a lever J, pivoted to one side of the frame, crossing the wheel B and extend-

ing at its free end through a guide-bracket J^2, secured to the opposite side of the frame and provided with a retracting-spring J^3. The brake-shoe is formed of a bow having parallel ends bolted to lever J, as shown clearly in Fig. 6.

On the frame A, directly in front of the sprocket-wheel C^2, is arranged a tool-box L, and on the rear part A^2 of the said frame A is arranged a second seat K, attached to a post K', supported on a cross-piece A^3, connecting the two side bars of the frame with each other. The rear wheel B' is preferably made without a flange, as previously stated, to reduce the frictional contact with the rail and to compel the rider to keep the wheel in proper adjustment.

By having the guide-wheel E mounted on the cross-bar F it is necessary for the rider to use the handle-bar H for balancing and for keeping the guide-wheel E in a proper forward or rearward position on curves, so that the tricycle readily rounds a curve without binding and without requiring the exertion of much propelling power, whereby an advantage is secured over railway-tricycles now in use. It will further be seen that on a sharp curve when the superelevation would raise or lower the base of guide-wheel six inches above or below the level of the wheels on the opposite rail this, where it is not possible to balance the frame, would cause it to lean over and make a very uncomfortable seat—in fact, make it very difficult to round a right-handed curve. This I overcome by manipulating the handle H. A rise or fall of the guide-wheel on the opposite rail of six inches either way does not in the least affect the frame A or cause it to lean over, and this variation in the level of the rails and through brace F^7 is how I secure the adjustment to the rail of the guide-wheel on curves, as it is quite plain that the distance between the pin F^8 and the base of the guide-wheel E will increase or decrease as said wheel rises or falls in respect to the level of the opposite rail, where it is not controlled by the brace F^7, which draws it back or pushes it ahead, as the case may be, just sufficient to suit any degree or curvature, and this is accomplished automatically, requiring no attention from the rider, as he simply manipulates the handles to keep the frame A in vertical position.

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

1. A railway tricycle comprising the main frame, the front and rear wheels, a propelling mechanism, a cross bar having a wheel at its outer end, a vertical post at its inner end, the lower end of the post being mounted loosely in the frame to permit lateral vibration at its upper end and a handle bar having a cranked rod mounted in bearings on the frame and connected with the upper end of the said post, substantially as described.

2. The combination with the frame and main wheels, of a spring retracted lever pivoted at one end to the frame and crossing the front wheel, and a brake shoe formed of a bowed plate having its ends bent parallel and secured to the said lever, the free end of the lever being adapted for engagement by the foot of the operator, substantially as shown and described.

3. A railway tricycle, comprising a frame carrying a front and rear wheel adapted to travel on one of the track rails, a cross bar mounted to swing on the frame and carrying a guide wheel for the other track rail, a brace connecting the cross bar with the frame, and a handle bar mounted on the frame and engaging the said cross bar, substantially as shown and described.

4. A railway tricycle, comprising a frame, a flanged front wheel journaled on the said frame, a flangeless rear wheel journaled on the said frame, said wheels being adapted to travel on one of the track rails, a cross bar mounted to turn on the said frame, a guide wheel for the other track rail, and journaled on the said cross bar, and a handle bar under the control of the operator and connected with the said cross bar to manipulate the latter, substantially as shown and described.

5. A railway tricycle, comprising a frame mounted on front and rear wheels, of which the latter is without a flange, a cross bar journaled in the said frame and carrying a guide wheel for one of the track rails, a handle bar mounted on the said frame and engaging the said cross bar, and a brace for connecting the said cross bar with the said frame, substantially as shown and described.

6. A railway tricycle, comprising a frame mounted on front and rear wheels, of which the latter is without a flange, a cross bar journaled in the said frame and carrying a guide wheel for one of the track rails, a handle bar mounted on the said frame and engaging the said cross bar, a brace connecting the said cross bar with the said frame, a tool box and a second seat, both mounted on the said frame, substantially as shown and described.

WILLIAM J. MELLOR.

Witnesses:
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