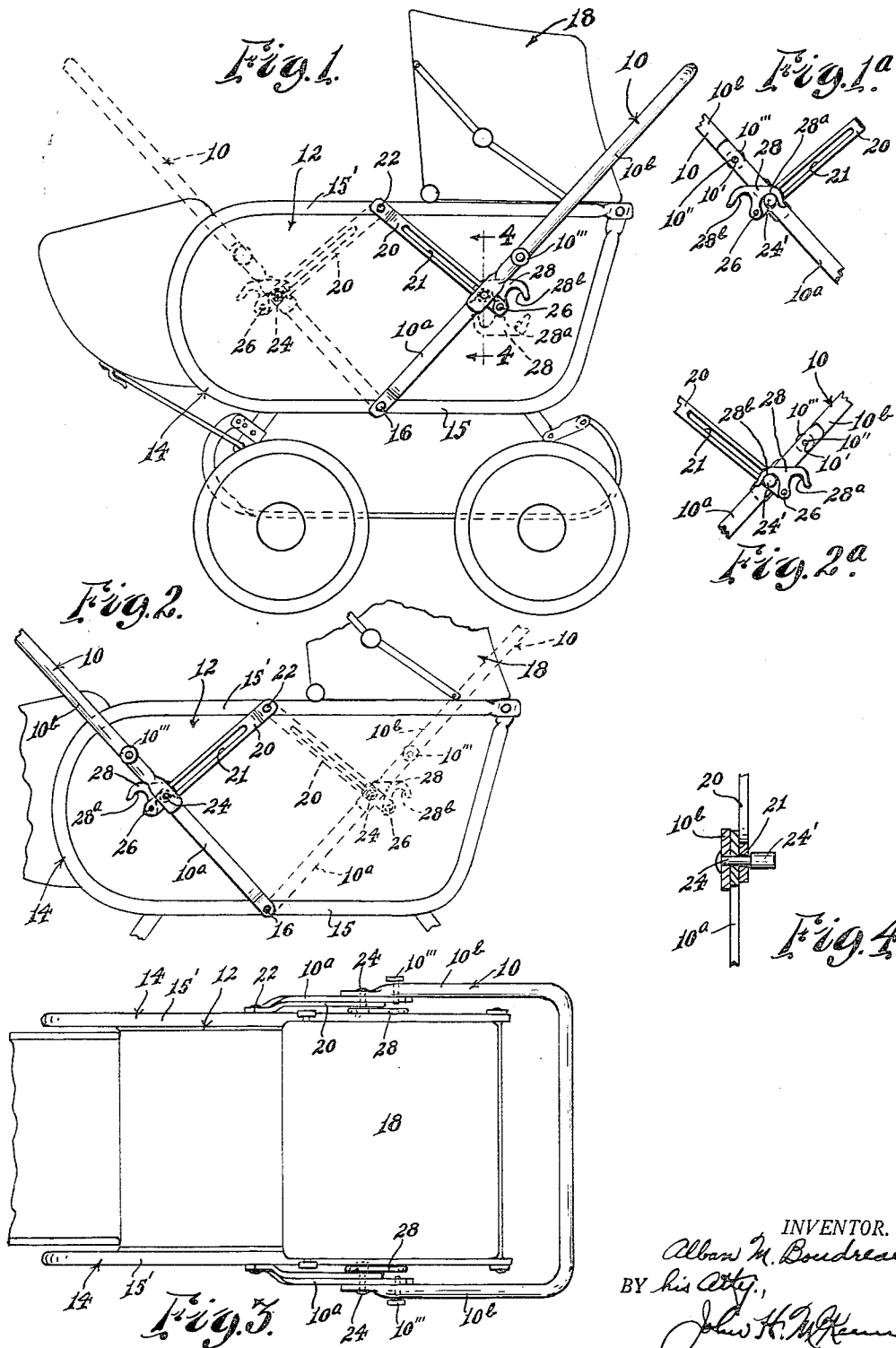


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PUSHER HANDLE CONTROL MECHANISM FOR BABY
CARRIAGES, STROLLERS, AND THE LIKE.
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PUSHER HANDLE CONTROL MECHANISM FOR BABY CARRIAGES, STROLLERS, AND THE LIKE

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This invention relates to improvements in baby and doll carriages and strollers. More particularly it relates to such vehicles of the general type wherein a pusher handle is movable between two operative positions so that either end of the vehicle may be the leading end, when the vehicle is being pushed by means of the pusher handle. The invention provides improved mechanism for controlling the movements of the pusher handle of such a vehicle as the pusher handle is being moved from one to the other of its two operative positions, and for effectively locking the pusher handle in each of its two operative positions.

It is among the objects of the invention to provide pusher handle mounting and control mechanism for baby and doll carriages, strollers, and the like, whereby a pusher handle more readily and conveniently may be shifted between two operative positions at opposite ends of the vehicle, as compared with prior comparable mechanisms, and be effectively maintained in either position.

Another object of the invention is to provide pusher handle control mechanism for baby and doll carriages, strollers, and the like, wherein the pusher handle is swingable between two operative positions at opposite ends of the vehicle body and wherein its movement to either of said operative positions is stopped by a pair of pivoted longitudinally slotted bars in whose slots projections on the pusher handle slidably engage, each said bar having pivoted means thereon for coaction with a said projection to securely lock the pusher handle in either of its said operative positions.

It is, moreover, my purpose and object generally to improve the structure and efficiency of pusher handle control mechanisms and more especially such mechanisms for controlling and locking reversible pusher handles of baby and doll carriages, strollers, and the like, wherein the handles are movable between two operative positions at opposite ends of the vehicles.

In the accompanying drawing:

Fig. 1 is a side elevation of a baby carriage whose pusher handle has control and locking mechanism embodying features of the invention associated therewith, the pusher handle being shown in full lines in one operative position and in dotted lines in its other operative position;

Fig. 1a is a fragmentary elevational view of the locking means shown in full lines in Fig. 1, looking at the inner side of the mechanism as shown in Fig. 1;

Fig. 2 is a view similar to Fig. 1, with portions broken away, but showing the pusher handle in full lines moved to the operative position which is shown by dotted lines in Fig. 1, and showing the pusher handle in dotted lines in its full line position of Fig. 1;

Fig. 2a is a view similar to Fig. 1a but looking at the inner side of the locking means shown in full lines in Fig. 2;

Fig. 3 is a top plan view of the carriage with the pusher handle in its Fig. 1 position; and

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Fig. 4 is a cross-sectional view on line 4—4 of Fig. 1, on a larger scale.

Referring to the drawing, the inverted generally U-shaped pusher handle 10 is shown pivotally mounted on the body 12 of a baby carriage although it will be apparent that the type or style of the vehicle may be variously modified without affecting the nature and scope of the invention which is applicable to baby and doll carriages, strollers, and the like, where it may be desirable to employ a pusher handle for pushing the vehicle with either end of the vehicle selectively constituting the leading end.

The particular carriage body 12 herein represented has a tubular frame 14 extending all around each side of the body, and the arms of the pusher handle 10 have their lower ends pivotally secured at 16 to the lower horizontal portions 15 of the tubular frames 14. The pivotal securements 16 are located substantially centrally between the opposite ends of the body 12, and the pusher handle 10 extends a substantial distance above the body 10 so that it may be swung about its pivotal axis at 16 between two operative positions indicated respectively in full lines and in dotted lines in Fig. 1. When the vehicle body has a conventional hood thereon, as represented at 18, the pusher handle 10 must clear the hood when moving between its two operative positions.

The movements of the pusher handle 10 are controlled and limited by a pair of longitudinally slotted bars 20, one at each side of the vehicle body 12, each pivotally connected at 22 to the upper horizontal portion 15' of the adjacent tubular frame 14, with the pivotal axis 22 of the two bars 20 substantially in the vertical plane of the pivotal axis 16 of the pusher handle 10. The slot 21 of each bar 20 is relatively long, and a pin 24, or the like, projects from each arm of the pusher handle and slidably engages in the slot 21 of the adjacent bar 20. Hence, when the pusher handle 10 is swung about its pivotal axis 16 from its full line position of Fig. 1 to its dotted line position in Fig. 1, or from its full line position in Fig. 2 to its dotted line position in Fig. 2, the bars 20 swing about their pivotal axis 22 in direction opposite to the direction of movement of the pusher handle, with the pins 24 riding along the side walls of the slots 21 in bars 20, and with end walls of the slots 21 limiting the swinging movement of the pusher handle in either direction.

It is a feature of the invention that each bar 20 extends a little beyond the adjacent pusher arm when the pusher arm is stopped at either limit of its permissible swinging movements, and each has pivotally mounted at 26 on this projecting end a locking member 28 having the oppositely disposed hook portions 28a, 28b. As best seen in Figs. 1a, 2a and 4, each of the pins 24 projects through and substantially beyond the adjacent slotted bar 20 with its projecting portion preferably enlarged for constituting a locking pin portion 24' with which the locking member 28 can engage to lock the pusher handle 10 in either of its operative positions. When the pusher handle 10 is in its full line operative position of Fig. 1, the locking member 28 may be swung counter-clockwise from its dotted disengaged position of Fig. 1 to its full line position thereby to engage its hook portion 28a over the adjacent locking pin portion 24' (see Fig. 1a) to securely lock the pusher handle in its full line operative position of Fig. 1. Similarly, when the pusher handle 10 is in its full line operative position of Fig. 2, the locking member 28 may be swung clockwise from its dotted position of Fig. 2 to its full line position thereby to engage its hook portion 28b over the adjacent locking pin portion 24' (see Fig. 2a) to securely lock the pusher handle in its full line operative position of Fig. 2.

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When the pusher handle 10 is to be locked by engagement of the hook portions 28a with the locking pin portions 24', or is to be unlocked, the other hook portions 28b constitute handles facilitating manual actuations of the locking members 28 into and out of locking engagement with the pin portions 24'. Similarly, when actuating hook portions 28b into and out of engagement with pin portions 24', the hook portions 28a conveniently may serve as handles.

The particular pusher handle 10 as herein represented has each of its arms formed in two parts 10a, 10b which are pivotally connected together at the pin projections 24 which serve as pivots for collapsing the upper portion of the pusher handle against the top of the carriage body. The lower portions 10a may be formed of flat bar stock while the upper portions 10b are of tubular stock. The lower portions 10a extend appreciably beyond the pin projections 24, and each has a hole therein at 10' for reception of a spring-pressed locking pin 10'' on the adjacent portion 10b. Each pin 10'' has a head 10''' thereon for manual withdrawal of its pin when the pusher handle is to be collapsed.

It will be apparent from the foregoing description, in connection with the drawing, that I have provided a simple and extremely effective pusher handle control and locking mechanism for baby and doll vehicles, and it is intended that the patent shall cover, by suitable expression in the appended claims, whatever features of patentable novelty exist in the invention disclosed.

I claim as my invention:

1. In a vehicle having a body and an inverted generally U-shaped pusher handle pivotally mounted on the body for movements about its pivotal axis between two operative positions at opposite ends of said body, the combination therewith of a longitudinally slotted bar having one end pivotally mounted on said body, a leg of said pusher handle having a projection thereon slidably engaged in the slot of said bar, and one end wall of said slot coacting with said projection to limit movements of said pusher handle in both directions about its pivotal axis, and a locking member pivotally mounted on the free end of said bar and having a pair of integral hook portions thereon, said locking member being swingable to engage one of said hook portions over said projection when the pusher handle is stopped at one limit of its movement and being swingable to engage the other of said hook portions over said projection when the pusher handle is stopped at the other limit of its movement.

2. In a vehicle having a body and an inverted generally U-shaped pusher handle pivotally mounted on the body with the leg members of the pusher handle at opposite sides of the body whereby the pusher handle may be moved about its pivotal axis to bring the bridge of the inverted U-shaped pusher handle to an operative position selectively at either end of the vehicle, said pivotal axis being low down on said body and at a mid-location between the opposite ends of the body, the combination therewith of a bar member having one of its ends pivotally secured to an upper portion of said body at a mid-location between the ends of the body, a connection between said bar member and the adjacent leg member of the pusher handle whereby a movement of the pusher handle about its pivotal axis effects a movement of said bar member about its pivot, said connection including a projection on one of the connected members slidably engaging in a relatively long slot in the other of the connected members, with said projection and one end of the slot coacting to stop the pusher handle at predetermined limits of movement in each direction about its pivotal axis, locking means pivotally mounted on that one of said connected members which has said slot therein and movable about its pivot independently of movements of

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said member on which it is pivotally mounted, said locking means being movable in one direction about its pivot into locking engagement with said projection when the pusher handle is stopped at one limit of its movement and being movable in the opposite direction about its pivot into locking engagement with said projection when the pusher handle is stopped at its other limit of movement.

3. In a vehicle of the baby and doll carriage variety, a body, a pusher handle pivotally mounted low down on the body with its pivotal axis substantially centrally between the opposite ends of the body whereby an upper portion of the pusher handle may be moved about said pivotal axis between two operative positions at opposite ends of the body, a bar having one end pivoted to the body at a location above the pivotal axis of the pusher handle, a pin-in-slot connection between said bar and pusher handle whereby a movement of the pusher handle in one direction about its pivotal axis effects a movement of said bar in the opposite direction about its pivot, said pin-in-slot connection stopping the pusher handle at each limit of its movement, said bar and pusher handle being angularly related when the pusher handle is in each of its said two operative positions at the opposite limits of its movements, and a locking element pivotally mounted on that one of the bar and pusher handle which has said slot therein and movable about its pivot independently of movements of that one of said bar and pusher handle on which it is pivotally mounted, said locking element having two notches therein and being movable in one direction about its pivot to engage the pin of said pin-in-slot connection in one of its notches, when the pusher handle is in one of its said operative positions, and said locking element being movable in the opposite direction about its pivot to engage said pin in the other of its notches when the pusher handle is in the other of its said operative positions.

4. In a vehicle of the baby and doll carriage variety, a body, an inverted generally U-shaped pusher handle pivotally mounted low down on the body with one leg of the inverted U at each side of the body whereby the bridge of the inverted U may be moved about the pivotal axis of the pusher handle between two operative positions at opposite ends of the body, said pivotal axis being substantially spaced from each end of the body, a longitudinally slotted bar pivotally mounted at each side of the body, each having its pivot at one end of the bar and above and substantially in the vertical plane of said pivotal axis of the pusher handle, a projection on each leg of the pusher handle, each said projection extending slidably through the slot in the adjacent one of said bars, whereby the said projections coact with end walls of the slots in said bars to stop the pusher handle with the bridge of the inverted U in either of its said operative positions, and a locking member pivotally mounted at the free end of each said bar, each locking member having two hook portions thereon and being movable about its pivot to bring one of its hook portions into locking engagement with a said projection when the pusher handle is stopped at one limit of its movement and being movable in the opposite direction about its pivot to bring the other of its hook portions into locking engagement with the same projection when the pusher handle is stopped at the other limit of its movement.

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