(No Model.)

G. C. BOND & J. SADLER.

CONVERTIBLE CARRIAGE AND CRADLE.

No. 323,390. Patented Aug. 4, 1885.

FIG. 1.

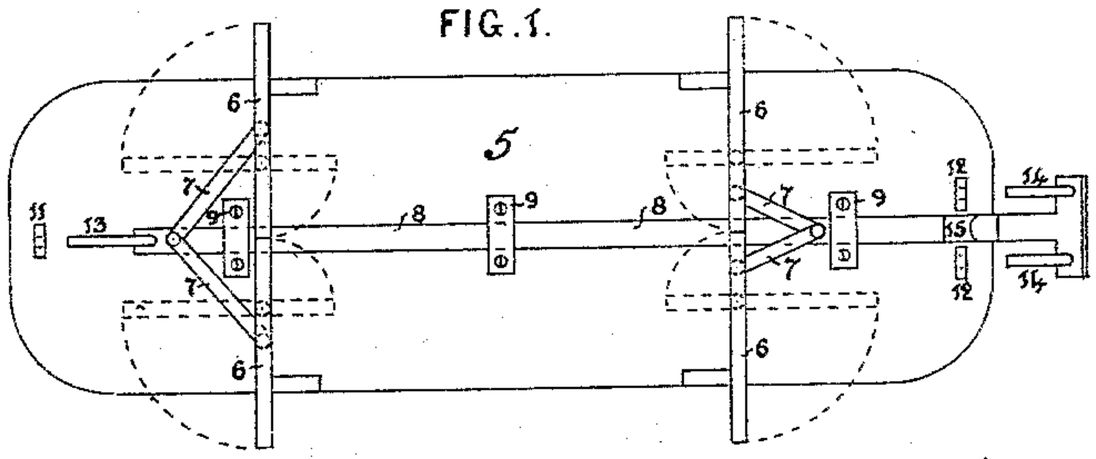


FIG. 3.

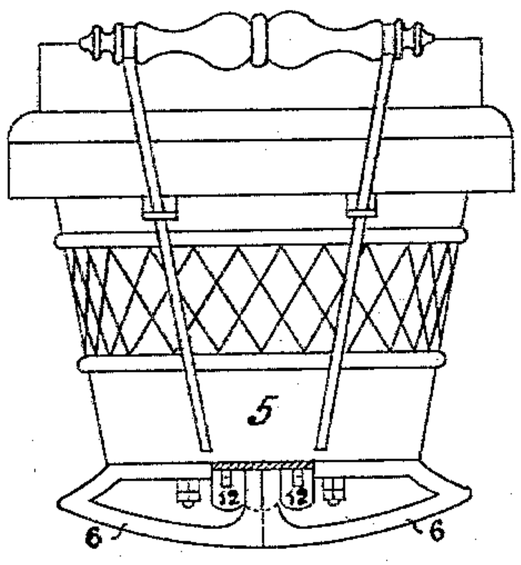


FIG. 4.

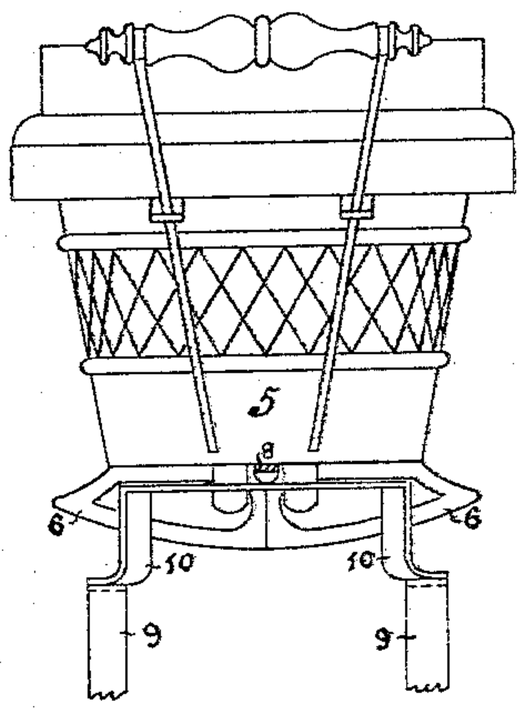
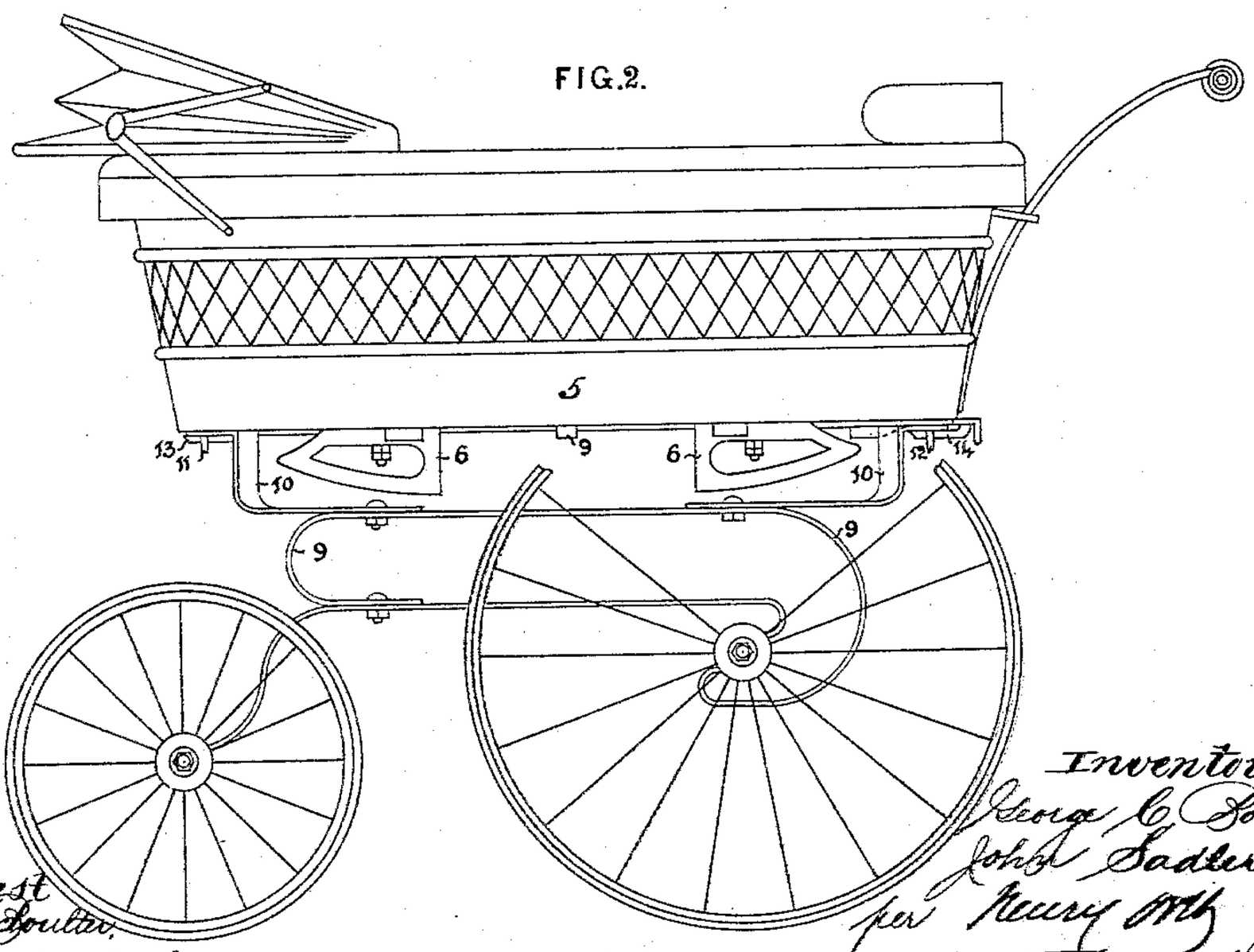


FIG. 2.



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UNITED STATES PATENT OFFICE.

GEORGE CRESWELL BOND AND JOHN SADLER, OF NOTTINGHAM, ENGLAND.

CONVERTIBLE CARRIAGE AND CRADLE.

SPECIFICATION forming part of Letters Patent No. 323,390, dated August 4, 1885.

Application filed May 26, 1885. (No model.) Patented in England March 31, 1884, No. 5,718.

To all whom it may concern:

Be it known that we, GEORGE CRESWELL BOND, mineral merchant, and JOHN SADLER, mechanic, both subjects of the Queen of England, residing at Nottingham, England, have invented new and useful Improvements in Perambulators Convertible into Cradles, (for which we have applied for British Letters Patent No. 5,718, of 1884,) of which the following is a specification.

The said invention relates to perambulators of the kind in which the body or cot of the vehicle may be detached from the framing to which the wheels are connected, and being placed on the ground is ready for use as a cradle.

In perambulators or vehicles for children as hitherto constructed to serve this double purpose the rockers are placed longitudinally or lengthwise of the cot, and consequently the rocking motion given to the cot is from head to foot. This motion is very unpleasant, if not injurious, being akin to the pitching motion of a ship; and it is the object of this invention to construct a perambulator which may be easily and quickly converted into a cradle to which a sidewise motion may be given, as is usual with ordinary cradles, either while the cot is upon the wheels or when detached therefrom.

In perambulators constructed according to the invention the wheels and springs are put together so as to form one connected part, and the body or cot is formed to fit on this part and be fastened thereto when it is wished to form a perambulator. Underneath the body there is fixed longitudinally a rod or bar having attached transversely to it two rockers. These rockers are each formed in two parts, which are capable of being folded together so as to be parallel, or nearly so, with the longitudinal rod or bar and out of sight when the body is fixed on the wheels; but when used as a cradle they are unfolded by pulling the longitudinal bar or rod. By pulling outward the longitudinal bar the cot is released from the wheels, and it may be rocked thereon, or it may be lifted off the wheels and placed on the ground, where it will rest upon the rockers, which by the outward movement of the bar or rod have been unfolded and brought crosswise to the cot.

And in order that our said invention and the manner of performing the same may be properly understood, we hereunto append a sheet of explanatory drawings, to be hereinafter referred to, and representing the improved arrangement of perambulators or children's vehicles.

In these drawings the same reference-numerals are used to mark the same or like parts wherever they are repeated.

Figure 1 on the accompanying sheet of drawings is an inverted plan of the body of a perambulator detached from the wheels. Fig. 2 is a side elevation of our improved perambulator, while Figs. 3 and 4 are, respectively, end views of the perambulator and the body detached from the wheels.

The body or cot of the improved perambulator is formed of the usual material and shape, except that we fit, by stitching or buttoning, pockets near one or both ends of the inside of the body, for the purpose of holding the baby's bottle conveniently for the occupant's use. The body or cot 5 has pivoted underneath it, to its bottom, four parts, 6, of wood, which parts 6 are so formed with a curve on their lower sides that when two of the parts are brought end to end they form a rocker and extend across the bottom of the cot 5, projecting slightly beyond its sides. Each one of the parts 6 is pivoted at about the middle of its length to the bottom of the cot 5, each pair of the parts 6 being placed, respectively, at the front and back of the cot 5 at about half the distance between the middle and ends of the cot. The parts 6 are connected by links 7 to a central flat bar, 8, of metal, fitted in bearings 9 longitudinally along the bottom of the cot 5. The pair of links 7 at the front end of the cot 5 are centered with their ends just beyond and outside of the pivots of the parts 6, while the ends of the other pair of links, 7, are centered near to the pivots, but between them. By this arrangement, when the bar 8 is pushed inward or toward the front of the cot 5, the rocker parts 6 are brought into the position indicated by dotted lines in Fig. 1, and are consequent-

ly out of the way when the cot is fixed upon the wheels.

The wheels of the perambulator are attached to a steel framing, 9, which forms the springs of the vehicle. At each end of this framing 9 there are upward extensions, 10, at each side of the vehicle, having between them flat horizontal parts for carrying the body or cot 5. The extensions 10 are of a height just sufficient to permit the rocker parts 6 to clear the longitudinal part of the framing 9 between the ends.

For securing the body or cot 5 on the framing 9 there are fixed to the bottom of the cot 5 three metal studs, 11 12, having rectangular holes formed through them. One of these studs, 11, is placed at the front in a line with the end of the bar 8, the end of which is formed with a nose, 13, to enter the hole in the stud 11. The other two studs, 12, are placed at the other end, one on each side of the bar 8. The bar 8, at this end, is formed with a cross or T piece, having two short projections, 14, side by side with and parallel to the bar 8.

When the body or cot 5 is placed on the framing 9, the studs 11 12 pass through holes made to receive them in the flat horizontal parts at each end of the framing 9, and on the bar 8 being moved forward to the front of the vehicle the nose 13 and projections 14 will pass under the flat horizontal part of the framing and, entering the holes in the studs 11 12, will secure the body or cot 5 on the wheels. At the same time, by the moving in of the bar 8, the rocker parts 6 will be brought to lie longitudinally with the vehicle and out of the way.

When it is wished to rock the body or cot 5 without removing it from the wheels, the bar 8 is pulled partly outward, but not quite to its full extent, and a cam-piece, 15, on it, near its back end, raises the body or cot 5 by coming between it and the flat horizontal end part of the framing at that end. The cam-piece 15, being round, enables the cot 5 to be rocked upon the framing 9, as shown in Fig. 3; but when it is wished to remove the body or cot 5 from the wheels and to form a cradle of it, the bar 8 is pulled out to its full extent, stops 16 being fixed on the body or cot 5 to prevent the bar 8 being moved farther when each pair of the rocker parts are parallel to each other. The body or cot 5 may then be removed and placed on the ground, resting on the rockers, as seen in Fig. 4.

We claim as our invention—

1. In a child's carriage, the combination, substantially as described, with the carriage-body provided with locking-studs and the supporting-frame constructed to engage said studs, of a longitudinally movable locking-bar, also constructed to engage the lugs and lock the frame to the carriage-body, for the purposes specified.

2. In a child's carriage, the combination, substantially as described, with the carriage-body provided with slotted locking-studs, and the supporting-frame constructed with slotted bearing-surfaces for the reception of said lugs, of a longitudinally-movable locking-bar constructed to engage the locking-studs to lock the frame to the body and stops to limit the movement of said bar in either direction, substantially as and for the purposes specified.

3. In a child's carriage convertible into a cradle, the combination, substantially as described, with the carriage-body, of two rockers, each formed in two sections pivoted to said body, and an operating-bar for oscillating the rocker-sections on their pivots to move the same into a position parallel with or at right angles to the longitudinal axis of the carriage-body, for the purposes specified.

4. In a child's carriage convertible into a cradle, the combination, substantially as described, with the carriage-body, of two rockers, each formed in two sections pivoted to said body, an operating-bar for oscillating the rockers on their pivots to move the same into a position parallel with or at right angles to the longitudinal axis of the carriage-body, and a stop to limit the oscillatory movement of the rocker-sections and the longitudinal movement of the locking-bar, for the purposes specified.

5. In a child's carriage convertible into a cradle, the combination, substantially as described, with the carriage-body, the rockers 6, pivoted thereto, and the frame from which said body is supported, of the locking-bar 8, adapted to lock the carriage-body to the frame and having a cam-surface whereby said carriage-body is slightly elevated above the frame and on which the body is adapted to rock laterally, as described, for the purpose specified.

6. The combination, of the longitudinal bar 8, links 7, and rocker parts 6, with the body or cot 5 of a perambulator, substantially as and for the purpose hereinbefore described with reference to the accompanying drawings.

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Witnesses:
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FRANK NEWHAM.