

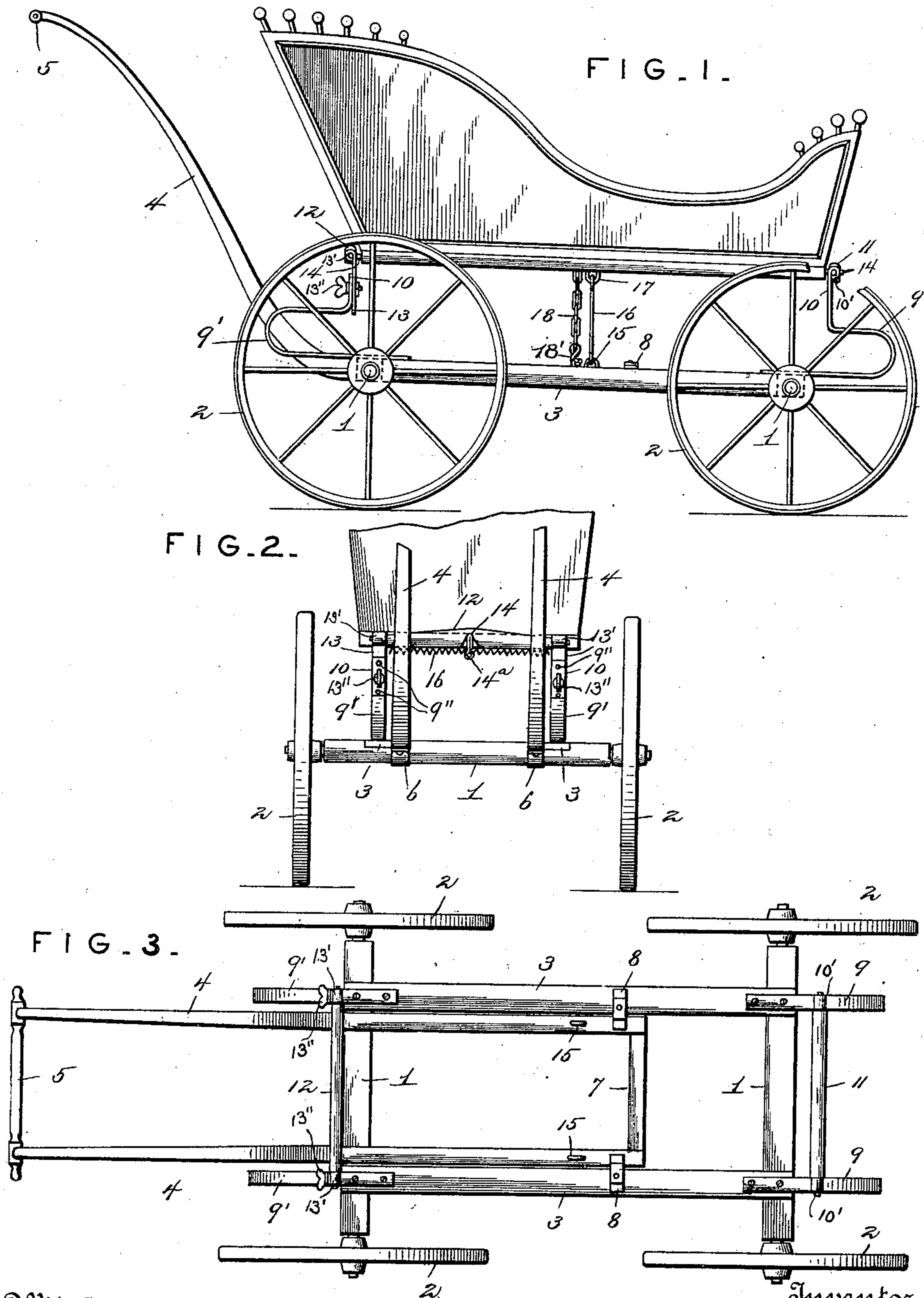
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Patented July 25, 1899.

A. J. HORN.
BABY CARRIAGE.

(Application filed June 28, 1897.)

(No Model.)



Witnesses
Harry L. Ames.
Victor J. Evans

Inventor
Andrew J. Horn.
By John Wedderburn
Attorney

UNITED STATES PATENT OFFICE.

ANDREW JACKSON HORN, OF LITCHFIELD, ILLINOIS.

BABY-CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 629,688, dated July 25, 1899.

Application filed June 28, 1897. Serial No. 642,639. (No model.)

To all whom it may concern:

Be it known that I, ANDREW JACKSON HORN, of Litchfield, in the county of Montgomery and State of Illinois, have invented certain new and useful Improvements in Baby-Carriages; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a construction of baby carriage or buggy whereby the comfort of the occupant is increased and the jar or jolting incident to the use of such carriages as ordinarily constructed is to a great extent avoided.

It consists in a means for supporting the body of the carriage above the running-gear thereof, whereby the body is not only rendered yielding relative to said running-gear, but is provided with a longitudinal pivotal connection with the frame of said gear, which permits it to receive a rocking motion similar to that of a cradle, and in certain details of construction and arrangement of parts, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a side elevation of a carriage embodying the invention. Fig. 2 is an end elevation of the same; and Fig. 3 is a plan view of the running-gear, springs, and propelling handle-bar with the carriage-body removed.

1 1 indicate the forward and rear axles, and 2 2 the wheels journaled on said axles in the usual manner.

3 3 indicate the side-bars connecting the axles, and 4 4 parallel handle-bars connected at their rear ends by a transverse hand-rod 5 in the usual manner, said bars extending upwardly in rear of the rear axle, as shown, and being provided at their junction with said axle with suitable bearing-loops 6 6, pivoted on said axle, from which point the bars 4 4 extend forward in parallel relation to the side of the frame-bars 3 and are connected at their forward ends by the transverse bar 7, as shown.

8 8 indicate buttons pivoted on the upper side of the bars 3 and adapted to be turned into engagement with the handle-bars 4 for limiting the upward movement of their forward

ends when the hand-rod 5 is depressed. Ordinarily, however, these buttons will be turned into planes coincident with the side-bars 3 and out of engagement with the bars 4, thus permitting them to vibrate up and down when desired and for a purpose hereinafter set forth.

9 9' indicate springs made in C shape, one being employed at each end of each side-bar 3 and secured at its lower end rigidly thereto, the forward springs 9 being set in reverse position relative to the rear springs 9', as shown. The upper ends of these springs are turned into a vertical position, as indicated at 10, and the forward ones terminate in bearings 10', in which is journaled a transverse slat 11. The vertical portions of the rear springs 9' are somewhat shorter than those of the front ones and instead of terminating in bearings are provided with a series of holes or slots 9".

13 are independent bars having bearings 13' at their upper ends and provided in their bodies each with a slot or series of holes.

13" are thumb-nuts and bolts.

The lower ends of the bars 13 are placed against the inner faces of the vertical portions 10 of the rear springs in such a position that the slots or holes will register. The thumb-nuts 13" are then applied to bind them together and furnish means whereby the height of the rear transverse slat 12 (which is journaled in the bearings 13') can be adjusted. In the drawings I have illustrated these adjustable bars as secured only to the rear springs; but obviously the front springs may be constructed in the same manner.

14 are studs or projections secured centrally to the front and rear lower portions of the body, and 14' are bearings which are located at the center of the transverse slats 11 and 12. The studs 14 are adapted to enter the bearings 14' and serve as a means for supporting the body of the carriage in such a position so that a lateral rocking motion may be imparted thereto when desired.

By the construction described it will be apparent that the height of the body relative to the running-gear can be adjusted for varying its angle or otherwise, as may be desired. Near the forward end of the handle-bars, on

their upper faces and beneath the carriage-body, are secured hooks or eyes 15 15. Similar hooks or eyes 17 are formed upon or secured to the bottom of the carriage-body beyond the longitudinal center near the edges. From one of these eyes 17 depends a link or hook 16, which engages one of the eyes 15 on the forward end of the handle-bar, and a chain 18 is secured to the other eye on the body and is provided with a hook 18' at its free end which is adapted to engage the other eye near the end of the handle-bar. This chain serves as a means to steady the vibratory movement of the carriage-body and to prevent it from rocking too far when the handle 5 is raised.

The rear stud or pivot is rigid in the body of the carriage and is provided with a pendent arm, terminating in an eye 14^a, from which springs 16 extend laterally on opposite sides to near the ends of slat 12, where they are secured and serve by their tension to hold the carriage-platform supported thereon normally in a horizontal position. The outer face of the rear slat 12 is provided with an inverted-V-shaped slot 12², extending from above the pivot to the lower edge of the slat, in which slot the arm of the rear stud stands flush with the outer surface of the slat and is allowed to oscillate by means of the shape of the slot. If desired, I may provide the front of the carriage with such a construction. In order to place the body of the carriage in position, all that is necessary is to insert the front stud in its bearing in the slat 11, then turn the rear slat 12 in its bearings until the pivot-bearing stands in a vertical position, insert the pendent arm therein, and then turn the slat back, so that the pivot-bearing stands horizontal. (The pivot-bearing is of such a size as to permit of such movement.) The springs are then attached and the links and chains 16 and 18 placed in position.

By the construction described it will be seen that the attendant or operator is enabled not only to impart vibratory movement upon the transverse pivot to the body of the carriage, but that said body is adapted to receive a rocking motion upon the longitudinal axis or pivot, which tends to give greatly-increased comfort to the occupant of the carriage. I do not limit myself to the exact details of the construction herein set forth, for considerable changes may be made without departing from the spirit of my invention.

Aside from the particular features described the carriage-body and running-gear may be of any usual construction and material, according to the fancy of the manufacturer or user.

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

1. In a carriage, the combination with the running-gear, of a pair of C-shaped springs at each end thereof, and transverse slats loosely journaled in the upper ends of said

springs and connecting them in pairs; of a carriage-body, studs at its front and rear ends adapted to form pivotal connections between the body and transverse slats, substantially as described.

2. In a carriage, the body thereof supported at its lower ends on central pivots, in combination with transverse slats to which said ends are pivoted, and C-shaped springs supporting said slats, the upper ends of one pair of said springs connected to said slats being provided with adjustable extensions, substantially as and for the purpose described.

3. In a baby-carriage, the combination with a running-gear, springs mounted thereon at the front and rear ends, slats journaled across the springs, pivot-bearings in said slats, and a V-shaped slot in the outer face of one of said slats adjacent the pivot-bearing; of a carriage-body, studs secured to the front and rear lower ends thereof and adapted to enter the bearings in the slats, a dependent arm on one of the studs standing within the slot and flush with the outer face of the slat, and means for rocking the carriage, substantially as and for the purpose set forth.

4. In a baby-carriage, the combination with a running-gear, springs mounted thereon at the front and rear ends, slats journaled across the springs, pivot-bearings in said slats, and a V-shaped slot in the outer face of one of said slats adjacent the pivot-bearing; of a carriage-body, studs secured to the front and rear lower ends thereof and adapted to enter the bearings in the slats, a dependent arm on one of the studs standing within the slot and flush with the outer face of the slat, springs connecting the arm with the ends of the slat, and means for rocking the carriage, substantially as and for the purpose set forth.

5. In a baby-carriage, the combination with a running-gear, springs mounted thereon, slats connecting the springs in pairs, a carriage-body and studs on the body adapted to form central pivotal connections with the slats; of a handle-bar pivoted between its ends to the rear axle, and a connection between the front end of the bar and one side of the body for rocking the latter, substantially as and for the purpose set forth.

6. In a baby-carriage, the combination with a running-gear, springs mounted thereon, and a body having central pivotal connections with the springs; of a handle-bar pivoted between its ends to the rear axle, connections between the forward end of the bar and the body, and means attached to the running-gear for engaging the handle-bar forward of its pivot for preventing the upward movement of the same, substantially as described.

7. In a baby-carriage, the combination with a running-gear, springs mounted thereon, and a body having central pivotal connections with the springs; of a handle-bar pivoted to the axle and extending for some distance beneath the body, eyes near the forward end of the bar and in the bottom of the carriage

near its edges, a link, and a chain adapted
to connect an eye on the body with one on
the handle-bar, and a button on the running-
gear adapted to engage the handle-bar to pre-
5 vent the upward movement of its front end,
substantially as and for the purpose speci-
fied.

In testimony whereof I have signed this
specification in the presence of two subscrib-
ing witnesses.

ANDREW JACKSON HORN.

Witnesses:

C. B. ATTERBURY,
ANDREW INGLES.