No. 682,479. Patented Sept. 10, 1901.

J. S. MERCER.

COMBINED BABY CARRIAGE AND CRADLE.

(Application filed July 27, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

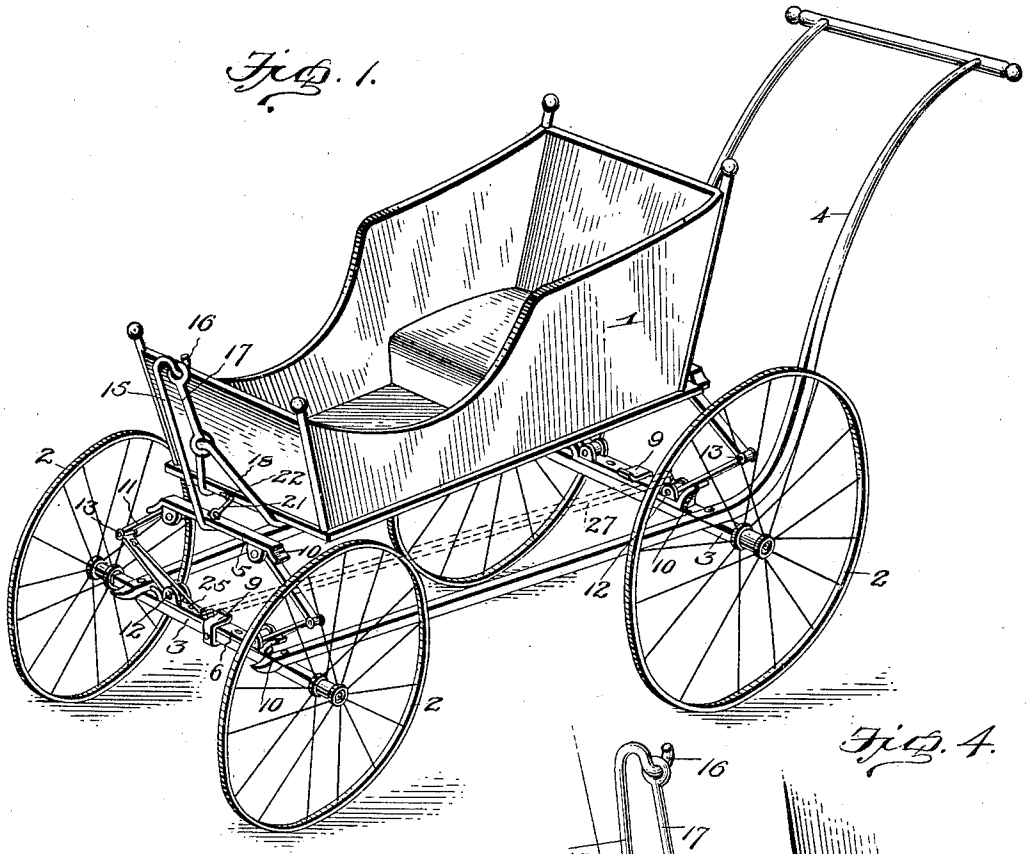


Fig. 4.

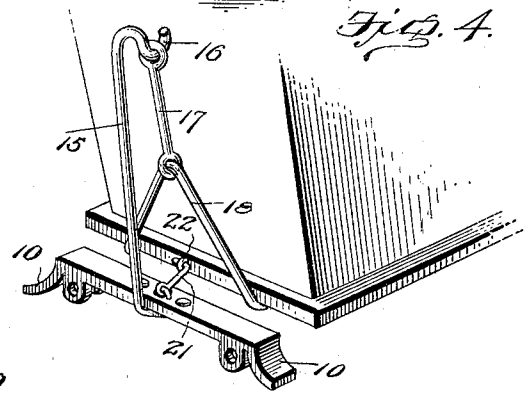
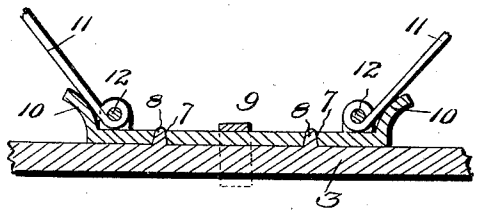


Fig. 5.



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2 Sheets—Sheet 2.

Fig. 2.

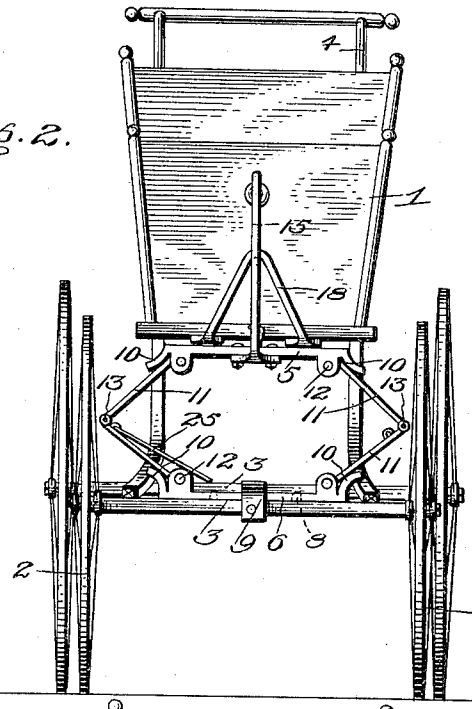
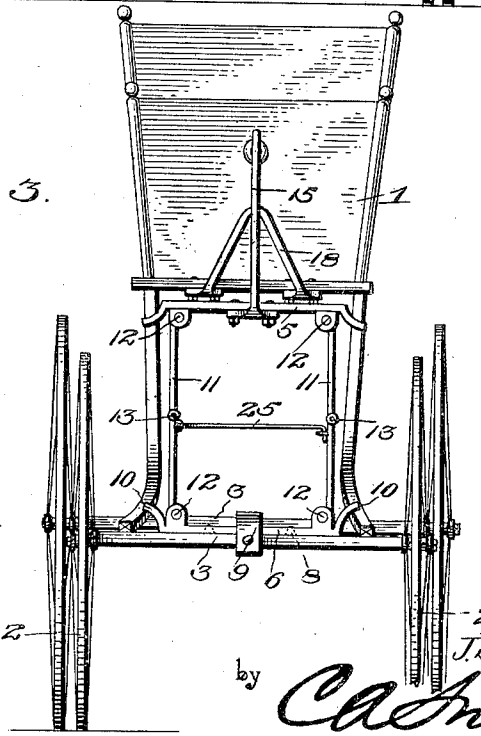


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN STEPHEN MERCER, OF ASHEVILLE, NORTH CAROLINA.

COMBINED BABY-CARRIAGE AND CRADLE.

SPECIFICATION forming part of Letters Patent No. 682,479, dated September 10, 1901.

Application filed July 27, 1901. Serial No. 69,954. (No model.)

To all whom it may concern:

Be it known that I, JOHN STEPHEN MERCER, a citizen of the United States, residing at Asheville, in the county of Buncombe and State of North Carolina, have invented a new and useful Combined Baby-Carriage and Cradle, of which the following is a specification.

My invention relates to certain improvements in children's carriages, and has for its object to provide an improved structure which may be employed either as a carriage or cradle, as desired.

A further object of the invention is to provide in such a structure for the ready detachment of the running-gear and the use of the device as a cradle only during bad weather or at such other periods as the use of the carriage may not be desired.

Further objects of the invention are to provide for the proper support of the body or basket when used either as a carriage or cradle and to permit of the ready changing of the device from one position to the other.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the claims, it being understood that changes in the form, proportions, sizes, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, in which similar characters refer to corresponding parts throughout the various views, Figure 1 is a perspective view of a combined carriage and cradle constructed in accordance with my invention and illustrating the positions assumed by the various parts when the device is adjusted for use as a carriage. Fig. 2 is a front elevation of the same with the parts in the position illustrated in Fig. 1. Fig. 3 is a similar view illustrating the position assumed by the parts when the device is adjusted for use as a cradle. Fig. 4 is a detail perspective view of one end of the carriage-body and its supporting devices, and Fig. 5 is a longitudinal sectional elevation illustrating the connection between the supporting devices and one of the axles of the running-gear.

Referring to the drawings, 1 represents a carriage body or basket of any suitable or approved construction, 2 the supporting-wheels, 3 the axles, and 4 the handle-bars connecting such axles, these portions of the device being of the construction common to all children's carriages.

The carriage-supporting mechanism comprises a pair of upper and lower bars 5 6, arranged at the front and at the rear of the carriage-body, the lower bar 6 of each pair being supported by the axle 3. The lower bars 6 are each provided with recesses or openings 7, through which extend centering-pins 8, projecting from the top of the axle and serving to prevent longitudinal or lateral displacement of the bars. The bars are held vertically to the axles by spring-clips 9, secured to the axles and provided with a horizontally-extending portion adapted to pass over the top of the bars and hold the latter securely in place. The clip 9 is of such character that a slight upward pull on the lower bar will permit the ready detachment of such bar from the pins 8 and permit the removal of the device from the axles.

Each bar 5 6 is provided with a flaring end portion 10, having a rounded surface forming a fulcrum-point for a spring-section 11, pivoted at one end to a pin 12 on the bar at a point within its flaring end, the opposite ends of the spring-sections being coupled together by pins 13, as shown, and any extended pivotal play or spreading of the spring-sections being prevented by the contact of such sections with the flaring end portions 10 of the bars.

To the central portion of each of the upper bars 5 is secured a standard 15, the upper end of which at a point above the center of gravity of the carriage-body is provided with a supporting-hook 16, with which is engaged one end of a link 17, the opposite end of the link being connected to a V-shaped body-iron passing under and firmly secured to the carriage bed or body 1. The links 17 and the body-iron 18 may be formed integral or may be loosely connected, depending on the length of the link, the connection between the two

being always at a point above the center of gravity of the carriage-body.

When the device is adjusted to the position shown in Fig. 1 for use as an ordinary carriage, a hook 21 is employed to connect the upper bars 5 with suitable eyes 22 on the base of the body portion to prevent any lateral swinging of the latter, the upper bars, the standards 15, and the body portion being thus united as a rigid structure and supported by the yielding spring-sections 11. The device when adjusted differs but little in appearance from the child's carriage in ordinary use.

When it is desired to adjust the device for use as a cradle, the body portion is elevated, causing the pivot-points 13 of the spring-sections to approach each other as such spring-sections assume the vertical positions shown in Fig. 3, and the spring-sections are then united and securely held together by a hook 25 to prevent any spreading movement. The hooks 21 are then loosened, and the carriage-body being in a plane above the tops of the wheels may be swung to and fro with the hooks 16 as a fulcrum.

In some cases, as where during a period of sickness or in bad weather, when the device cannot be used as a carriage, the running-gear may be entirely detached by removing the bars 6 from their axial connection and then stowed away, the cradle portion being used as a separate article and taking up much less room than would the running-gear and handles, if retained. In order to suitably brace the device when thus detached, one or more bars or rods 27 are employed to connect the front and rear bars 6, as shown in Fig. 1.

The device as herein described may be at a cost but little, if any, greater than the ordinary carriage, and while presenting an appearance differing but little from the ordinary carriage combines all of the desirable features of both the carriage and the cradle.

Having thus described my invention, what I claim is—

1. The combination in a child's carriage, of the running-gear, the body portion adjustable to positions above and below the wheels of the running-gear, and extensible supports connecting the body portion to the running-gear, said supports acting as springs when the body portion is in the lowest position and as rigid supports when the body portion is elevated.

2. The combination in a child's carriage, of the body portion, springs for supporting the body portion, said springs each comprising pairs of centrally-hinged plates adapted to be bent in opposite directions and to be moved on their hinged points to substantially vertical positions, and means for locking said plates in said vertical positions.

3. The combination in a child's carriage, of the body portion, upper and lower plates having flaring ends, spring-sections hinged to said plates and to each other, means for locking said springs in vertically-extended position, the running-gear, and means for connecting the upper and lower plates to the body portion and to the running-gear respectively, substantially as specified.

4. The combination in a child's carriage, of the body portion, upper and lower plates having flaring ends, spring-sections hinged to said plates and to each other, means for locking said spring-sections in vertically-extended position, means for connecting the lower plates to the axles of the running-gear, hooks carried by the upper plate and means for suspending the body portion on said hooks, substantially as specified.

5. The combination in a child's carriage, of the running-gear, the body portion, upper and lower bars arranged in pairs at each end of the body portion, the lower bar of each pair being detachably secured to the running-gear, a hooked standard carried by the upper bar of each pair and adapted for connection to the body portion, and adjustable springs provided between the upper and lower bars, substantially as specified.

6. The combination in a child's carriage, of the wheel-axles, pins thereon, a perforated plate or bar adapted to said axle, spring-sections pivoted to said plate or bar, a second plate or bar, spring-sections pivoted thereto and to the spring-sections of the first plate or bar, hook-sections carried by said upper plate or bar, and a body portion or basket hung on said hooks, substantially as specified.

7. The combination in a child's carriage, of the wheel-axles, a supporting device arranged on each axle and comprising a pair of oppositely-disposed plates having flaring end portions, spring-sections pivoted to the bars and to each other and adapted to bear on such flaring end portions, means for holding the spring-sections in vertically-extended position, standards secured to the upper bar of each pair, hooks arranged at the upper ends of said standards, a carriage body or basket, and means for connecting said carriage body or basket to said hooks, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN STEPHEN MERCER.

Witnesses:

S. A. McCAULESS,

I. J. L. PAGE.