

J. L. CORTELYOU.  
Children's Carriages.

No. 149,838.

Patented April 21, 1874.

Fig. 1

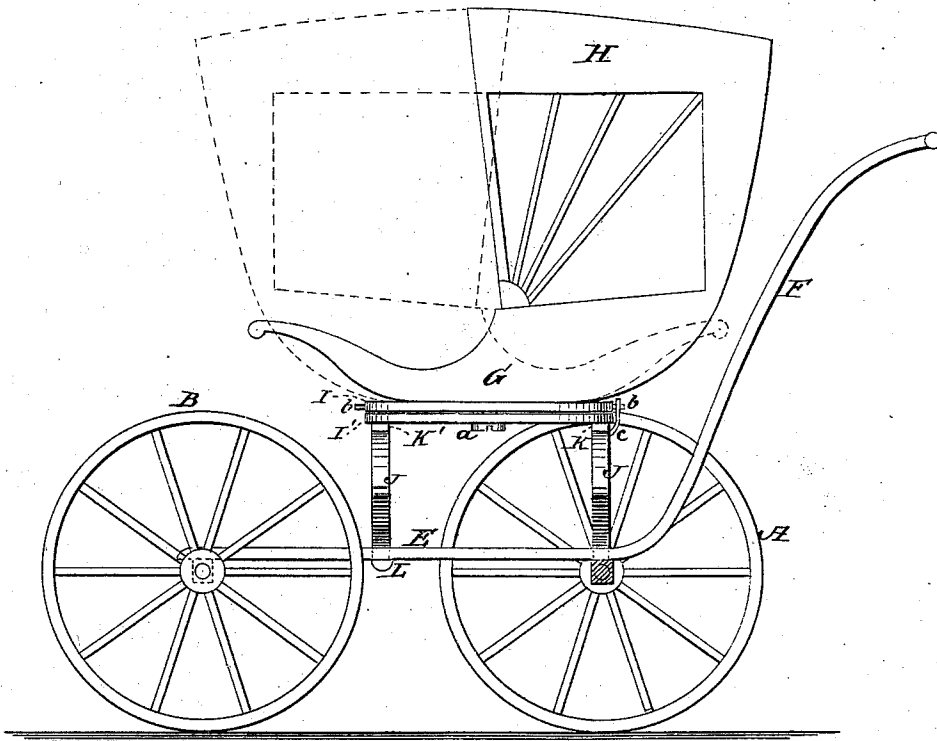


Fig. 2

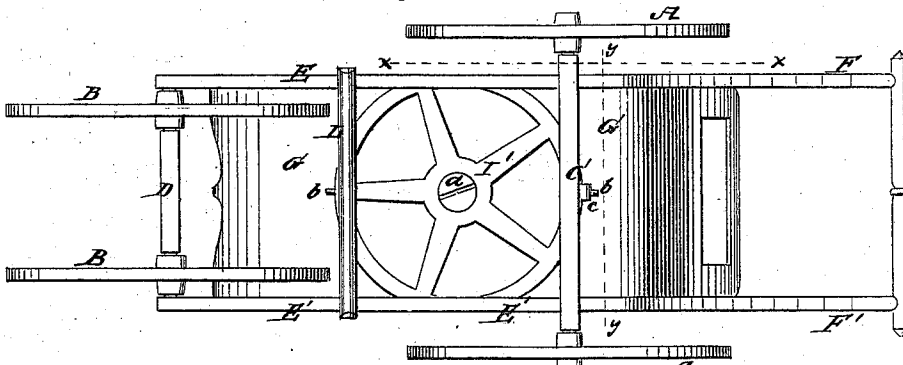
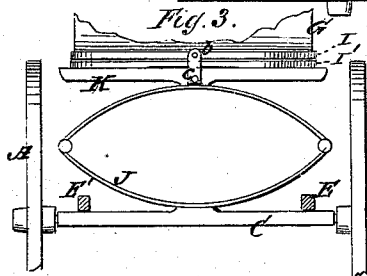


Fig. 3.



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# UNITED STATES PATENT OFFICE

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## IMPROVEMENT IN CHILDREN'S CARRIAGES.

Specification forming part of Letters Patent No. 149,838, dated April 21, 1874; application filed December 12, 1873.

*To all whom it may concern:*

Be it known that I, JACOB L. CORTELYOU, of the city of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Children's Carriages; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing which forms a part of this specification:

This invention relates to that class of children's carriages or perambulators in which the body is so arranged as to be reversible—that is to say, so that it may be caused to face in a rearward direction, or toward the propelling-handles, as well as in the opposite or forward direction. Heretofore this has been accomplished by pivoting the propelling-handles to the reaches and then pivoting the body to a cross-piece secured to the handles. (See patent to Wightman, June 13, 1871.) In order to reverse the body in this arrangement, so as to clear the wheels, it was necessary to raise the same bodily, by the handles, then turn it around, and then lower the same, so that the handles shall assume their former position. With a reversible body child's carriage so constructed, the reversing of the body cannot be properly done without removing the baby or child from the carriage, because, to clear the wheels, the body must be tipped forward at an angle so great that a baby would be thrown out, and, beside this, much inconvenience and trouble are necessarily incurred each time the carriage-body is reversed, and, furthermore, the propelling-handles and other parts are liable to be injured by undue strain. Another way heretofore existing of constructing a reversible body child's carriage, (see patent to Atwater, June 4, 1872,) is by providing the front curved ends of the reaches or sills with a sharper and longer curve than usual, so as to place the body somewhat higher, and, by connecting the rear end or part of such reaches or sills to the rear axle by flat springs curved to correspond with the curved front ends of the sills, and arranged between the sill and the axle. The body is then mounted on these elevated sills or reaches, and placed thereon a little farther forward than usual, so that the curve of its back will enable it to clear the rear wheels.

With this construction the lifting of the body, incident to the previously-described construction, is avoided, but other difficulties are encountered. When the body has been reversed so that it will face the propelling-handles, substantially the whole weight of the body is thrown upon the curved forward ends of the reaches, and hence upon the front wheels, and the whole structure is overbalanced and awkward to manage, it being a difficult task to elevate the forward wheels by depressing the propelling-handles in the usual way, in order to mount a curbstone or other obstruction; and the strain comes upon the reaches, axles, and rear springs in an entirely improper and unnatural manner, for the reason that the construction of the running-gear is not sufficiently changed to be adapted to a changeable body; and hence the body rides unsteady, and does not present a natural appearance, whichever way the body happens to face.

Now that I have pointed out some of the objectionable features particularly appertaining to the two respective styles of reversible body children's carriages referred to, I will mention one very great objection common to both of the said styles of carriage. In a child's carriage it has been found that it is actually necessary to have a spring resistance of some kind located under the rear part of the body of the carriage; otherwise the baby in the carriage would be fearfully jolted, even when propelling the carriage along a sidewalk where the flagging-stones are laid with ordinary evenness. Now, in the example of reversible body child's carriage hereinabove first alluded to (Wightman's) there are no springs at all; and in the example last alluded to, (Atwater's,) when the body is in a reversed position—that is, facing rearward—it is thrown off or away from the sustaining-springs, so that there is no spring-resistance of any kind under the rear part of the body; in fact, when the body is reversed the carriage is little better than the other one referred to, which makes no pretence at all in the way of springs. It therefore follows that a reversible body child's carriage constructed in either of the above ways possesses so many objectionable features as to fall far short of the requirements of the public.

The object, therefore, of my invention is to

produce a child's carriage or perambulator in which the body can be reversed easily and quickly without raising the same or taking the child out, and the weight of which, when reversed, will be properly distributed between the forward and rear axles, and which will have the adequate spring-sustaining power when in a reversed position, and consequently be a thoroughly practical and efficient reversible body child's carriage or perambulator.

To such end my invention consists in the combination of the following parts: A pivoted and reversible body, a front and a rear axle, and front and rear wheels, reaches or sills between the axles, propelling-handles and elliptical or other suitable springs arranged between the said reversible body and the said reaches or sills, whereby I am enabled to produce a thoroughly practical, durable, and efficient reversible body child's carriage or perambulator. It also consists in the combination, with the front and rear axles of a child's carriage, of two reaches extending from the forward to the rear axle, and then upward, so as to form propelling-handles without a break or joint between a reach and a propelling-handle, whereby great strength in one of the most material parts of the carriage is obtained.

In the accompanying drawing, Figure 1 is a side elevation of a child's carriage or perambulator, one of the rear wheels having been removed, as indicated by the line *x x*, Fig. 2. Fig. 2 is a plan view of the bottom of such carriage or perambulator. Fig. 3 is a vertical section taken on the plane of the line *y y*, Fig. 2.

A A designate the two rear wheels, and B B the two forward wheels, of the perambulator. The said rear wheels are mounted upon an axle, C, and the forward wheels upon an axle, D. I have shown the rear wheels A A so mounted upon their axle as to be arranged outside of the body, as in an ordinary roadway-carriage, and I have shown the forward wheels B B so mounted upon their axle as to be arranged within the reaches or sills E E'; but I will remark that any of the well-known arrangements of wheels will admit of the application of my invention. For instance, both pairs of wheels may be outside of the sills, or reaches, or body, and may either revolve upon stationary axles or may be secured to revolving axles. F F' are the propelling-handles. I preferably make the propelling-handle F and reach E in one piece, or of one strip of wood or metal, and the propelling-handle F' and reach E' in the same manner, as in such case I obtain greater strength and durability than when the propelling-handles are made of separate pieces and attached by screws, pivots, or nails to the body, or reaches, or axle. G designates

the body of the carriage, which may be provided with a top, H, and a seat of the usual or any suitable construction. I I' are two circular plates forming a turn-table for reversing the position of the carriage-body G, the plate I being secured to the under side of the body G, so as to rest upon the plate I', which is secured to cross-bars K K', or their equivalents, mounted on the supporting-springs J J, the two plates being held together by a pin, *a*, which serves as a pivot. Any suitable means may be employed for securing the body when facing in either a forward or rearward direction. I have shown pins *b b* projecting from opposite sides of the plate I, and a spring-catch, *c*, secured to the cross-bar K', for engaging with the said pins. The arrangement of these supporting-springs is an important feature of my invention. I have shown elliptical springs, one of which is supported on a cross-bar, L, extending from one reach to the other, and the other upon the rear axle C; but any other suitable style, as well as arrangement of spring, will answer the purpose; but these springs J J should be so located on the reaches with respect to the axles of the carriage as to bring the weight of the body, when reversed, on the said springs, and as much, if not more, upon the rear axle and wheels, than upon the front axle and wheels, so that the front wheels may be raised in the usual manner for ascending a curbstone by bearing down upon the propelling-handles. In the arrangement shown this can be done easily, whether the carriage-body be facing in a forward or a rearward direction, and this is a most important desideratum in a child's carriage with a reversible body. And besides this, the construction I have shown enables me to use reaches or sills arranged on substantially the same horizontal plane as the axles, and to use elliptical springs.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The pivoted body G, bearing-plates I I', springs J J placed above the reaches, the reaches E E', and propelling-handles F F', all combined and applied to the axles of a child's carriage so that the body may be reversed above the wheels, as set forth.

2. The combination of the propelling-handles and reaches E F and E' F', each constructed of a continuous piece with the axles C C, springs J J, and reversible body G, substantially as described.

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Witnesses:

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