F. BOYLSTON.

Improvement in Children's Carriages.

No. 125,533. Patented April 9, 1872.

Fig. 1.

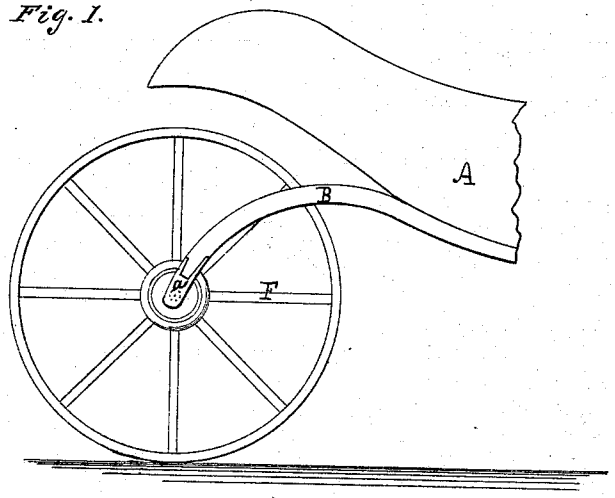


Fig. 3.

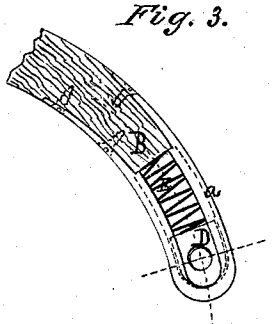


Fig. 4.

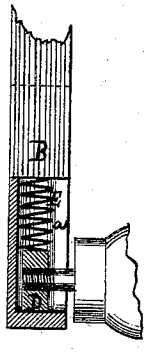


Fig. 2.

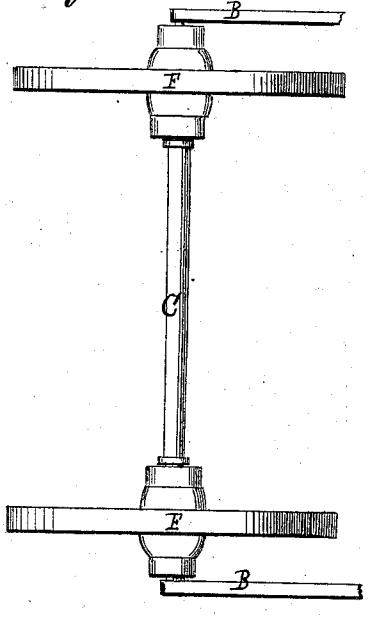


Fig. 6.

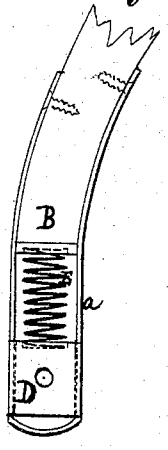


Fig. 5.

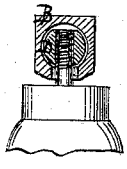
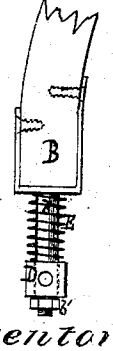


Fig. 7.



Witnesses:

M. M. Livingston

T. B. Beecher

Inventor:

Francis Boylston

125,533

UNITED STATES PATENT OFFICE.

FRANCIS BOYLSTON, OF NEW YORK, N. Y.

IMPROVEMENT IN CHILDREN'S CARRIAGES.

Specification forming part of Letters Patent No. 125,533, dated April 9, 1872.

To all whom it may concern:

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

This invention relates to an improvement in attaching the axle to the sills or reach of a child's carriage or perambulator, more especially, though not exclusively, appertaining to the style of perambulator shown and described in United States Letters Patent originally granted me, FRANCIS BOYLSTON, October 6, 1868, as well as in United States Letters Patent granted to Andrew Christian, April 24, 1866, wherein two wheels, arranged between the "sills," so called, of the carriage are employed, those shown in the patent first cited being arranged to revolve upon a stationary axle, and those in the patent last cited being secured to the axle and revolving with it. My invention consists in the combination, with the sills or reach and axle-tree of a child's carriage or perambulator, of spring journal-boxes or blocks, into which the ends of the axle-tree are journaled or secured, whereby the axle-tree is allowed a vertical play bodily and as to either end, thereby materially or wholly preventing the concussion, caused by the wheels striking an obstacle like a curb-stone, from being felt by the infant rider, and also permitting either of the wheels to ride over an obstacle without tilting the carriage sidewise, as occurs with these vehicles as at present constructed.

In the accompanying drawing, Figure 1 is a side elevation of the forward part of a child's carriage or perambulator, showing my improvement applied thereto. Fig. 2 is a plan or top view of the front axle and a portion of the sills of the carriage. Fig. 3 is a longitudinal central section of the forward end of one of the sills, showing my invention applied thereto. Fig. 4 is a similar section taken on the plane of a line drawn at right angles to that on which Fig. 3 is taken. Fig. 5 is a transverse or cross-section taken through the sill close to the axle. Fig. 6 shows a modification of my invention. Fig. 7 also shows a modification of my invention.

A designates the forward end of the body of a child's carriage. I have not deemed it necessary to illustrate the carriage in detail, as it is not dissimilar in construction to those in common every-day use, and as my improvement appertains to the forward part only. B B designate the sills, upon which the body rests. These sills or reaches are generally two strips of wood, bent or curved downward at their forward ends, and in their forward extremities the axle of the forward wheel or wheels is journaled when the wheels revolve with the axle, and permanently secured when the wheels revolve upon the axle. C designates the front axle, which I have shown as provided with two front wheels arranged between the sills, such being the most approved construction, though my invention is applicable to carriages with but a single front wheel, and to carriages with two front wheels which are located outside of the sills or reach. The forward end of each sill D is provided with a recessed end, which may be made directly in the wood, or a box, *a*, provided with a recess, may be secured to the end of the sill. D is a block, arranged within the recess or box *a* in such manner as to have a vertical play, and its motion is controlled by a spring, E, preferably a spiral spring, but a rubber spring or any other suitable spring may be employed to operate either by compression, as shown, or torsion, according to its specific arrangement with relation to the block or box D. In the drawing I have shown two wheels, F, revolving upon a fixed axle-tree; hence the ends of the axle-tree should be permanently secured to the block D; and to accomplish this I preferably provide each end of the axle-tree with a male screw-thread, and provide the block with female screw-threads, and connect the parts by screwing the former into the latter. But in cases where the wheels revolve with the axle-tree I provide the axle-tree with journals which enter the blocks D, the latter serving in such case as journal-boxes. In Figs. 6 and 7 I have shown two modifications in the manner of arranging the block or journal-box D. In the former figure a metal loop forms the box *a*, and this loop clasps a neck or central shank formed on the block D, which latter extends entirely through the loop. In this form the axle may be carried through the block

D and receive wheels upon it outside the sills, if desired. In the latter figure the end of each sill is provided with a shank, *b*, preferably a metal shank, which passes through a bore in the block D, the latter being prevented from dropping off of said shank by a nut or head, *b'*. In both cases a spring, E, or its equivalent, is employed in connection with the block or box D.

From the foregoing description it will appear obvious that all the advantages resulting from the use of a spring under the forward end of a roadway carriage is obtained by my simple and efficient improvement in a child's carriage or perambulator without changing its present general construction. If the forward wheel or wheels strike an obstacle, such as a curb-stone, or in jumping a curb-stone, the force of the concussion is taken up by the springs in the sills, and if one wheel is caused to ride over an obstruction the spring will permit the axle to deflect or rise at this end, and hence no tilting sidewise of the vehicle occurs.

My invention provides a long-needed improvement in children's carriages or perambulators, and one which is inexpensive, simple, and very efficient.

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

In a child's carriage or perambulator, the combination, with the axle C and sills B B, of the blocks or boxes D D and springs E E, arranged and operating substantially as and for the purposes herein specified.

FRANCIS BOYLSTON.

Witnesses:

M. M. LIVINGSTON,

T. B. BEECHER.