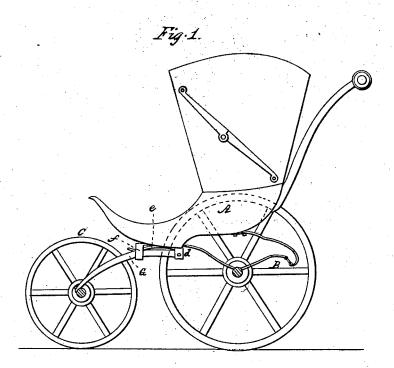
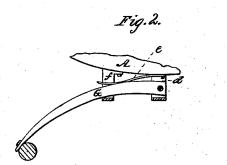
R. G. BRITTON.

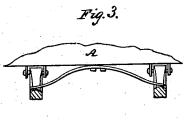
Child's Carriage.

No. 111,103.

Patented Jan. 24, 1871.







Witnesses: M.M. Phillips Kate A Jones Inventor: R. G. Britton Per J. Fraser 160. Attys

United States Patent Office.

RODNEY G. BRITTON, OF SPRINGFIELD, VERMONT.

Letters Patent No. 111,103, dated January 24, 1871.

IMPROVEMENT IN CHILDREN'S CARRIAGES.

The Schedule referred to in these Letters Patent and making part of the same.

I, RODNEY G. BRITTON, of Springfield, in the county of Windsor and State of Vermont; have invented an Improvement in the Construction of Children's Carriages, of which the following is a specification.

My invention consists in forming the connection between the forward axle and the body or arms, which are pivoted to the latter, with a spring or springs interposed in such a manner as to allow the front wheels to accommodate themselves to the inequalities of the ground, or one to pass over a raised obstruction without raising the other or tipping the carriage, and also to diminish the effect upon the occupant of the carriage of the shock of striking such obstacles.

In the drawing—

Figure 1 is a side elevation of a child's carriage with my improvement;

Figure 2 is an enlarged detached view of one of the reach-arms and springs; and

Figure 3 is a modification, in which a single halfelliptic spring is made to serve for both reach-arms, the latter being shown in section.

As represented in the drawing-

A is the body of an ordinary child's carriage;

B, the hind, and

C, the forward wheels.

The axle of the former is connected with the rear portion of the body by **C**-springs, in the ordinary manner; but the axle, instead of being connected with the body by a rigidly-attached reach or reach arms, has those arms G G attached to the body by means of the pivoted fastening d, on which they are at liberty to vibrate when the forward wheels are passing over an irregular surface, or that one may yield, if a single wheel is raised, without affecting the other.

Between the pivot d and the body, preferably forward of the joint, I interpose a spring, e, of such form and so connected either with the arm or the body that it will keep the body from resting directly on the arm,

and by yielding, when the force of one or both of the front wheels strikes an obstacle, allow them (or one of them) to pass without tipping the body or the shock being directly communicated thereto. As each arm is separately pivoted, one wheel may rise or sink, the axle inclining therewith without tipping the body of the carriage.

The arms may or may not work in guides f, which also serve to keep the free ends of the spring in place. I prefer to use a separate spring, which may be flat, coiled, or of any shape to give the requisite elasticity; but the same result may be produced in nearly as effectual, though not as economical, a manner by employing a single half-elliptic spring, fig. 3, each end bearing upon one of the arms, and the center supporting the body to which it is attached, as shown in fig. 3. A single reach-arm and spring, or the two converging to the center of the axle, may be used with a similar effect.

Not only does this improvement secure elasticity to the body upon the forward axle, but it allows the body to vibrate more freely on the rear springs by transferring the center of motion to the joint d. It is inexpensive, and adds to the durability by modifying the severity of the resistance encountered by the forward wheels, as well as promoting the ease and comfort of the rider.

I claim as my invention—

The combination of the reach-arms G G, jointed to the body A, within fastenings, with the interposed spring or springs e, substantially as and for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

RODNEY G. BRITTON.

Witnesses:

KATE N. JONES, WHEELER PHILLIPS.