

J. SUES.

Children's Carriages.

No. 153,629.

Patented July 28, 1874.

Fig: 1.

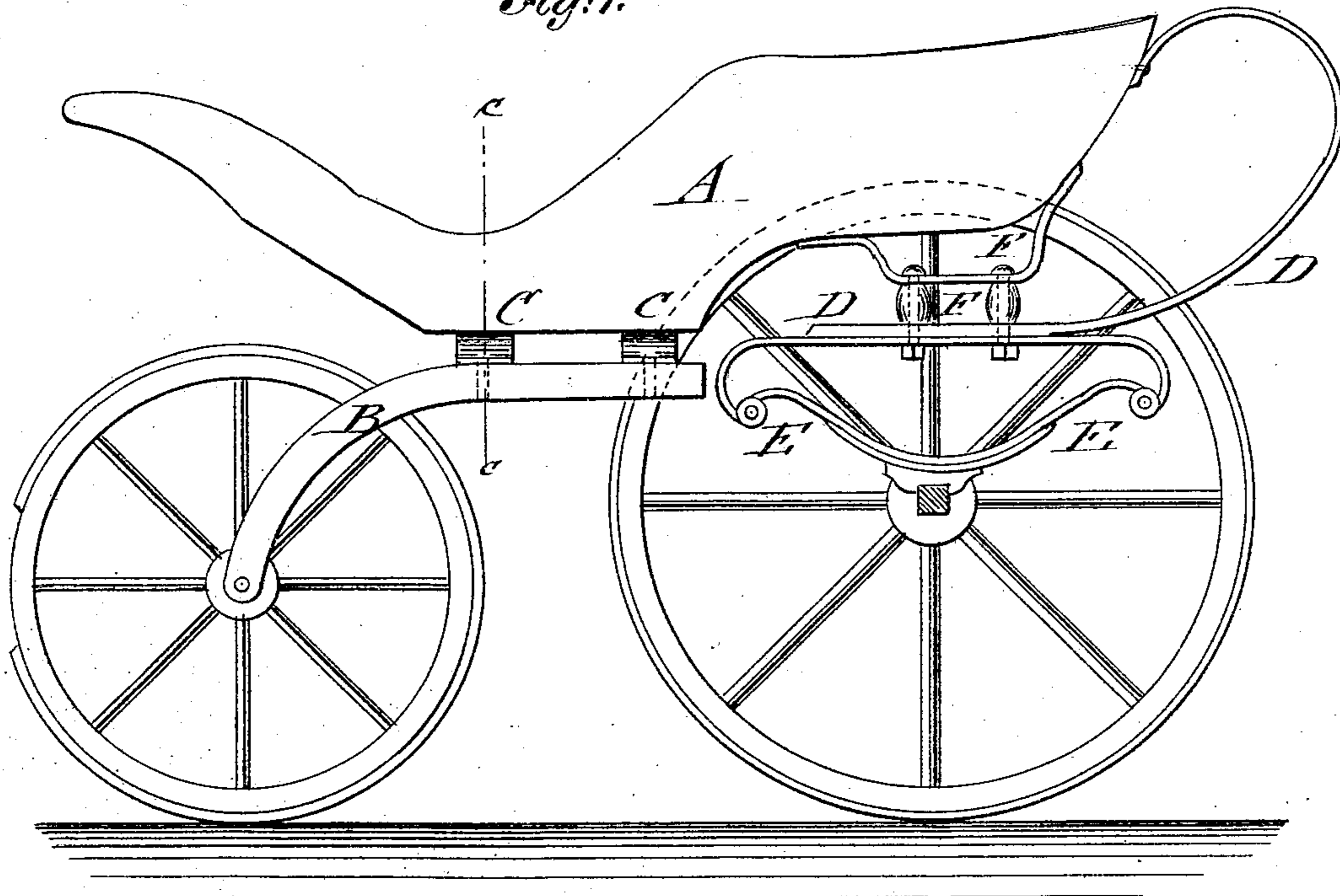
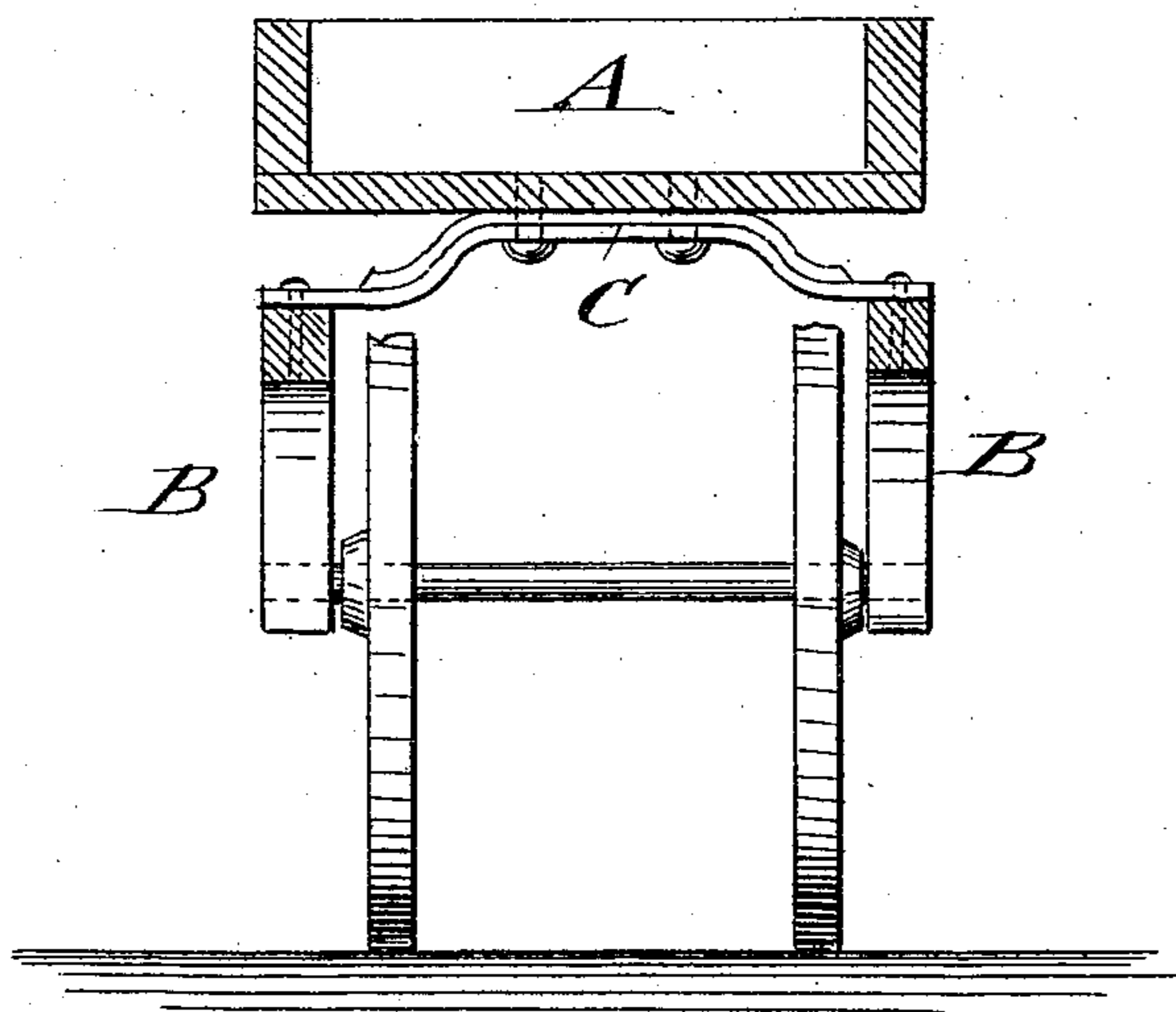


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE

JULIUS SUES, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN CHILDREN'S CARRIAGES.

Specification forming part of Letters Patent No. **153,629**, dated July 28, 1874; application filed April 25, 1874.

To all whom it may concern:

Be it known that I, JULIUS SUES, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and Improved Child's Carriage, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of my improved child's carriage; and Fig. 2, a vertical transverse section of the same on the line *c c*, showing the spring attachment of front wheels.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claims.

In the drawing, A represents the body of a child's carriage, which is supported on the front wheels by curved wooden or metallic sills or bars B and strong lateral springs C. Springs C are firmly bolted to the body A, and also to the rear end of the bars B, the front end carrying the axle of the front wheels. By placing the front part of the body on springs, not only an up and-down motion, but also a rocking motion, of the carriage is obtained, and the elasticity of the same increased. The hind part of the body A is supported by two additional curved springs, D, of swan-neck shape, which are interposed between the usual elliptic supporting-springs E and the body. The front end of spring D is firmly attached, by means of connecting screw-bolts and pillar-blocks or spools F, directly to the body of the carriage, or to an intermediate bracket-shaped casting, F', as shown in Fig. 1. The rear part of spring D is attached to the back of the body, near the upper part thereof. The support of the body by the springs is thereby strengthened, and the constant upward jarring of springs E arrested. The connecting-spools F' throw every part of the springs into elastic activity, while giving the carriage, also, a lighter, neater, and more ornamental appearance. A complete front and rear spring carriage is thus obtained, which is of simple and strong construction,

and combines greater elasticity with increased durability and stylishness. The spring-sills D D, made of steel or wood, and applied as shown, receive and break the shock, whenever the front wheels strike a rock, communicating the balance of jar to the lateral springs, which, by their vertical motion, fully expend the shock, lateral springs being pressed upward and downward more or less, according to the severity of shock received—for instance, riding the carriage over a brick three inches thick, the ends of one lateral spring will spring upward about three-eighths of an inch and the other press downward nearly one inch, thus breaking the shock completely. The two lateral springs, each acting separately with a perfect elastic vertical motion, attached to and in combination with spring-sills D D, adapt themselves by their elasticity constantly to any unevenness and roughness of the ground, balancing the body perfectly, acting similarly to the motion of a ship on the ocean.

My combination front springs, by their uniformity of action, give the body, even when moved on perfectly level ground, a vibrating, oscillating motion, and by the constant rocking and spring motion, cause every part of rear spring to be set in motion, making in every respect an easy and comfortable riding full-spring carriage. It is simple, not expensive, and certainly exceedingly strong.

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

1. The front cross-springs C C, attached directly to the body of carriage in the middle, and at each end to a sill, B, all combined as and for the purpose set forth.

2. The rear swan-neck springs D D, spools F F, and springs E E, combined with the body and axle of a child's carriage, in the manner and for the purpose specified.

JULIUS SUES.

Witnesses:

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