(No Model.)

W. E. CRANDALL.

CHILD'S CARRIAGE.

No. 356,100. Patented Jan. 18, 1887.

Fig. 1.

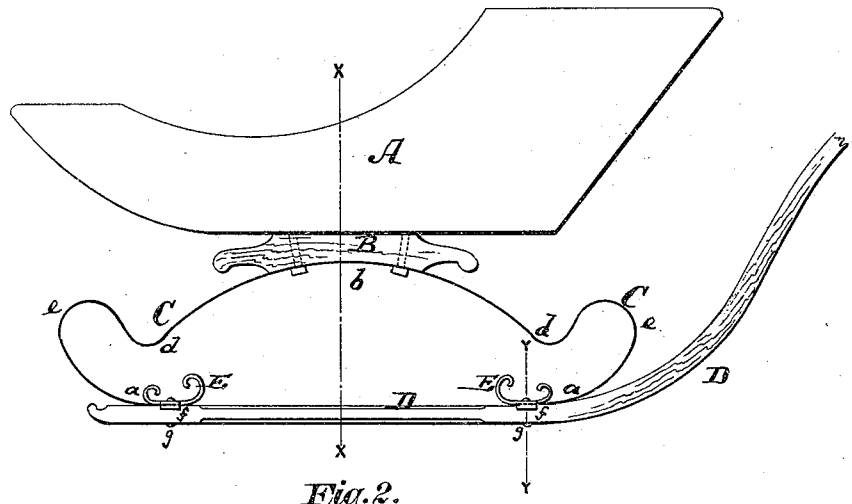


Fig. 2.

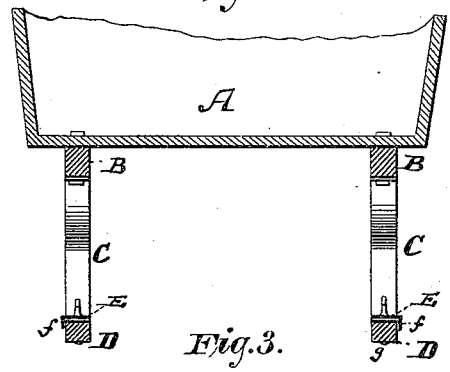
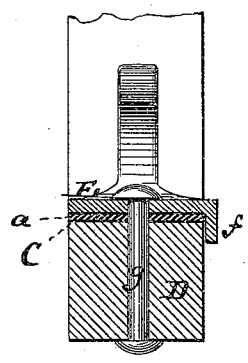


Fig. 3.



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CHILD'S CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 356,100, dated January 18, 1887.

Application filed September 28, 1886. Serial No. 214,714. (No model.)

To all whom it may concern.

Be it known that I, WILLIAM E. CRANDALL, a resident of New York city, in the county and State of New York, have invented an Improvement in Children's Carriages, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of a child's carriage, showing my improvement. Fig. 2 is a cross-section of the same on the line *x x*, Fig. 1, and Fig. 3 is an enlarged cross-section on the line *y y*, Fig. 1.

This invention relates to a new construction of and fastener for the spring of a child's carriage, its object being to make each side spring of the carriage of one continuous piece, instead of making it in sections, as has heretofore for the most part been done.

The invention consists, first, in making the spring of the peculiar form and construction hereinafter specified, and, secondly, in combining it with the peculiar fasteners hereinafter described.

In the drawings, the letter A represents the body of a child's carriage. To the under side of this body are secured two longitudinal bolsters, B, which rest upon the springs C, each spring resting upon a longitudinal reach or rod, D. The said reaches or rods D are supported in the usual or suitable manner by the axles of the vehicle.

My invention has to do only with the construction of the springs C C and with the manner of their connection with the bolsters B and reaches D. Each spring C is made in one single piece, having its two ends *a a* fastened upon the reach D and its convex or arched middle portion, *b*, fastened by bolts to the concave under side of the bolster B. The arched middle portion, *b*, of each spring C is joined by depressed portions *d* of the spring with elevated end portions, *e*, so that the upper surface of the spring will be corrugated, having the three elevations *e b e* and the two depressions *d d*. Each elevation *e* connects with one end of the spring *a*, that is rigidly fastened upon the reach D, as shown in Fig. 1. A spring of this construction, being made all together in one piece, can be economically produced, easily applied to the parts of the carriage, and will be elastic and reliable. In every way it will be superior to a spring made in more than one piece and where the several pieces are flexibly jointed, as has heretofore been the practice.

What I mean by the statement that my spring C, with its three elevations and two depressions, is made in one piece is that it is a continuous piece on each side of the bolster. Of course, underneath the bolster it may be pieced without departing from the spirit of my invention. Each end *a* of the spring C is fastened to the reach D by means of a clip or plate, E, which has a downwardly-projecting lip, *f*, on one side. The plate E is placed over the end *a* of the spring C, as in Fig. 3, so that the lip *f* bears against the face of the reach D, and a bolt, *g*, then secures the plate E, spring *a*, and reach D together. The lip *f*, bearing against the face of the reach, prevents the clip E from turning and helps to conceal the end of the spring, so that the latter cannot injure the garments of persons, which it is apt to do when exposed.

I claim—

1. The combination of the reach D with the continuous spring C, the ends *a* of which are both secured to the reach, and the said spring having the end elevations, *e e*, the arched central elevation, *b*, and the intervening depressions, *d d*, and with the bolster B of the carriage-body, to which the central elevation, *b*, is attached, substantially as herein shown and described.

2. The carriage-spring C, constructed with the two end elevations, *e e*, the two contiguous depressions *d d*, and the single central elevation, *b*, all in one piece, as specified.

WM. E. CRANDALL.

Witnesses:
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