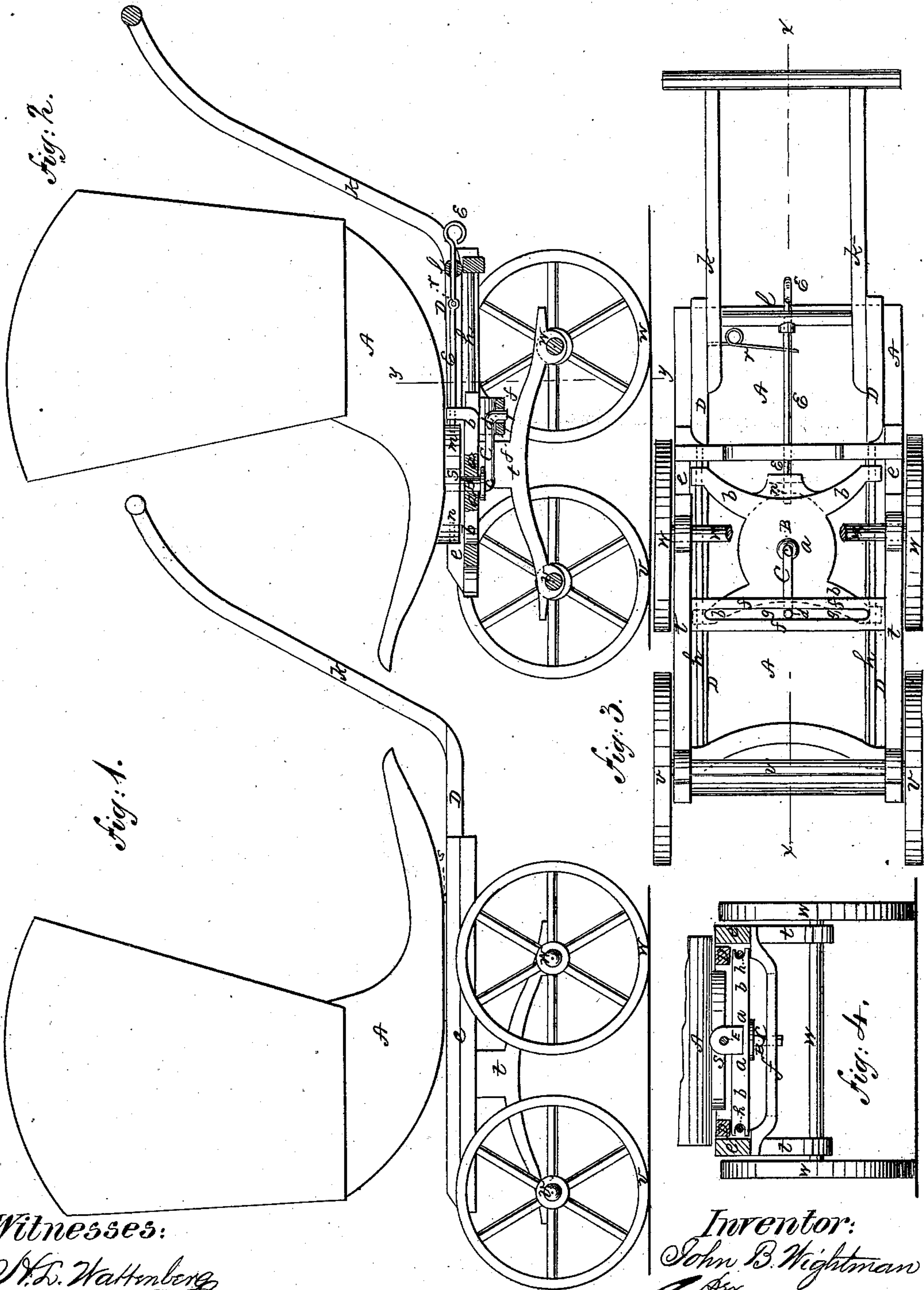


J. B. WIGHTMAN.
Child's Carriage.

No. 224,976.

Patented Feb. 24, 1880.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN B. WIGHTMAN, OF BROOKLYN, NEW YORK.

CHILD'S CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 224,976, dated February 24, 1880.

Application filed December 8, 1879.

To all whom it may concern:

Be it known that I, JOHN B. WIGHTMAN, of Brooklyn, in the county of Kings and State of New York, have invented a 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 drawings, and to the letters of reference marked thereon, making part of this specification.

This invention is in the nature of an improvement in children's carriages; and the invention consists in a child's carriage constructed with a reversible and pivoted body secured to horizontal sliding bars, to which the push-handles are fixed, so that as the body is turned on its pivot the pivot and the center of gravity of the body are shifted and the leverage of the handles increased or diminished, as is more particularly hereinafter described.

In the accompanying sheet of drawings, Figure 1 represents a side elevation of my improved carriage with body reversed; Fig. 2, a longitudinal section of operating parts in line *x x*, Fig. 3, with body in ordinary position; Fig. 3, under-side view of my carriage, with body reversed or facing push-handle; and Fig. 4, transverse section in line *y y*, Fig. 2.

Similar letters of reference indicate like parts in the several figures.

A represents the body of a child's carriage, which may be of any desired size and form. To the under side of this body, or the floor of the same, is centrally fixed a pivot-pin, B. This pivot passes through the center of a spider, *a*, having four radial arms, *b*. The pivot-pin, after passing through this spider, is bent at right angles at *c* and *d*, forming thereby a crank, C.

To the side bars, *e*, of the running-gear proper of my carriage are secured two parallel bars, *f*, which extend from one bar, *e*, to the other, spanning them. These bars *f* have a space, *g*, between them, and into this space the crank C enters or projects. Also, secured to the running-gear of the carriage, and parallel with the bars *e*, are two guide-rods, *h*. These guide-rods pass through the radial arms *b* of the spider *a*. Also, to these radial arms of the spider are firmly secured sliding bars D, these bars being parallel to and resting in contact

with the inner surface of the parallel bars *e*.

To the outer ends of these sliding bars D are firmly fixed the push-handle bars *k*, and in any convenient manner, as to a brace, *l*, is secured a bolt-rod, E, which passes beneath the spider *a* and into either the hole *m* or *n*, as the case may be, formed in a bearing-plate, *s*, fixed to the under side of the body A of the carriage. This bolt-rod has a spring, *r*, secured to it, so that the bolt-rod may, to some extent, act automatically, and be kept in place.

To the bars *e* are fixed the springs *t* and wheels and axles *v* and *w*, which are of the ordinary construction.

Now, my carriage being constructed substantially as I have described it, it is operated by simply turning the body A in either direction, (whether back to the front, or vice versa;) and as the body is turned on its pivot-pin B the crank C in the space *g* bears against the bars *f*, (on one when the body is turned in one direction, and on the other when it is turned in the contrary or other direction,) and as the body continues to turn this crank continues to bear against these bars, and by so doing it forces the sliding bars D outward or inward, as the case may be, depending upon the direction that the body A is turned; and as these bars in this way slide they are guided in their movement by the guide-rods *h* and the side bars, *e*, the radial arms *b* of the spider *a* sliding on the rods, and the sliding bars D bearing against the sides of the bars *e*.

When the body is fully moved or turned to the desired position the bolt-rod E automatically, by the action of the spring *r*, enters into either one of the holes *m* or *n* in the bearing-plate *s*, and holds the body firmly in the required position until it is again required to shift the position of the body, when the bolt-rod is withdrawn and the body turned as before, the bolt then entering the hole on the opposite side of the plate *s*. Now, as the body A is in this way turned it will be observed that its center of gravity is shifted—that is, when the occupant faces the push-handles the center of gravity is brought nearly over the axle *w*, and when the body is reversed from this position the center of gravity is nearly midway between the two axles. The advantage derived from this is, that when the body

A is turned so as to face the handles *k* the back of the carriage is opposed to the sun or rain, shading and protecting the occupant therefrom; but when in this position the center of gravity ordinarily is so far back as to render the raising of the front wheels by the handles, in order to pass a curb or other obstruction, a matter of difficulty; but by my construction not only is the center of gravity thrown forward under these circumstances, but the handles *k* are also thrust forward, giving room for the body to turn, and also increasing the leverage of the handles, so that with little effort upon them the carriage is tilted to raise the front wheels, so as to permit the vehicle to readily pass any obstruction that may be opposed to it.

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

1. A child's carriage constructed with a horizontally-shifting pivot, in combination

with slide-bars, whereby the position of the body of the carriage and its center of gravity may be changed by sliding the body horizontally on said bars, substantially as and for the purpose described. 25

2. In a child's carriage with a reversible body, extension slide-bars *D*, in combination with a crank, *C*, substantially as and for the purpose described. 30

3. In a child's carriage with a reversible body, the combination of slide-bars *D*, side bars, *e*, spider *a*, crank *C*, and parallel bars *f*, as and for the purpose described. 35

4. In a child's carriage with a reversible body, a crank, *C*, in combination with guide-rods *h*, substantially as and for the purpose described.

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Witnesses:

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