J. F. DOWNING.

COMBINED CHAIR AND CARRIAGE.

No. 188,344. Patented March 13, 1877.

Fig. 1.

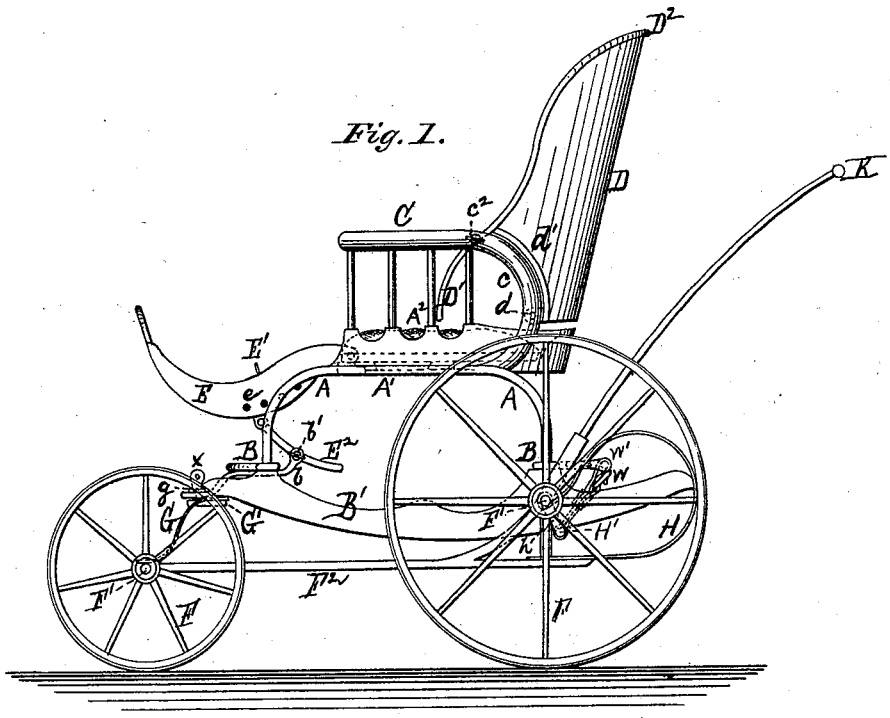


Fig. 3.

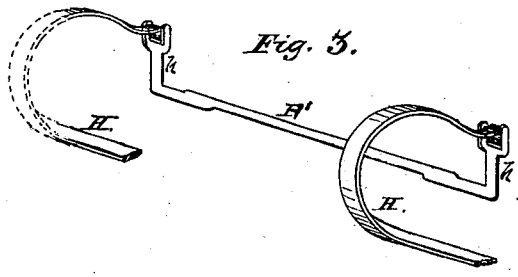


Fig. 2.

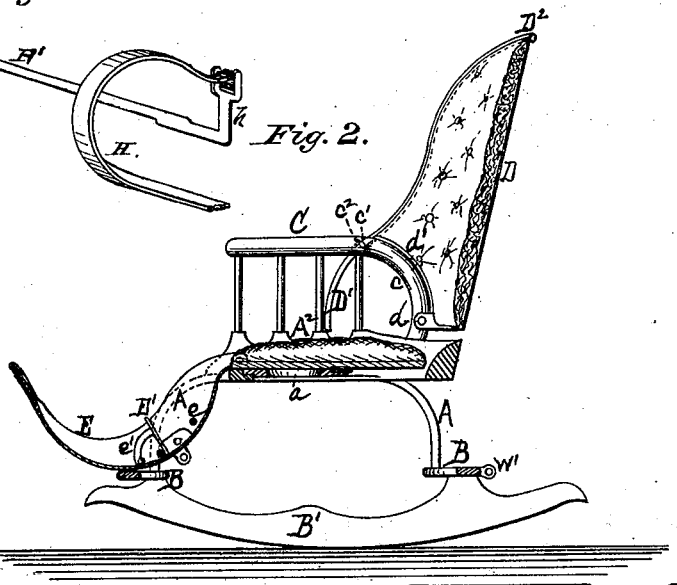
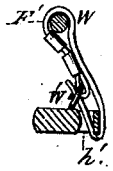


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

JEROME F. DOWNING, OF ERIE, PENNSYLVANIA.

IMPROVEMENT IN COMBINED CHAIR AND CARRIAGE.

Specification forming part of Letters Patent No. **185,344**, dated March 13, 1877; application filed November 25, 1876.

To all whom it may concern:

Be it known that I, JEROME F. DOWNING, of the city and county of Erie and State of Pennsylvania, have invented an Improved Child's Chair and Carriage, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, and the letters of reference marked thereon, making part of this specification, in which—

Figure 1 is a side view of the chair and carriage. Fig. 2 is a longitudinal sectional view, the running-gear of the carriage being detached from the chair. Fig. 3 is a detached view of the rear spring. Fig. 4 is a detached view of the device for attaching the rear of the chair to the running-gear of the carriage.

The object of my invention is the construction of a child's chair and carriage which, by slight manipulation, can be used as either.

The nature of my invention consists in pivoting the back to the rear section of the arms, and rendering its angle of inclination adjustable by means of curved arms attached to, or forming part of, the sides of the back.

My invention further consists in rendering the foot-rest adjustable by means of a curved arm secured to the foot-rest and underneath the same, and also in providing the foot-rest with a secondary foot-rest, as hereinafter described.

My invention also consists in attaching the chair, by means of its rockers, to the running-gear of a child's carriage, and by this means enabling the child's chair to be converted into a child's carriage when desired.

The construction and operation of my invention are as follows:

A A are the legs, and, like the other portions of the chair, may be of any desired form, and constructed out of any suitable material. To the upper section of the legs A A is secured the seat A^1, which is provided with the usual central opening *a*, to permit the child to use the chair with a nursery-vessel when desired, as shown in Fig. 2. A^2 is the cushion, which is hinged to the back of the seat A^1, so that it may be lifted up and thrown back when occasion requires. To the bottom of the front legs, as well as the rear, are secured cross-bars B B, to which the rockers B′ B′ are attached. To the sides of the seat A^1 are secured the arms C C, which are curved at the rear, as shown at *c*. These arms C C each have a hole or orifice, c^1, in them, near where the curved portion *c* of the same begins. D is the back, which is pivoted to the rear section of the arms, and immediately above where they join the seat, as shown at *d*. The lower section *d′* of the sides of the back D are curved, so as to fit over the curved portion *c* of the arms C when the back is raised up. Around the top and sides of the back D is secured a rim, D^2, of thick wire or other suitable material. The extensions of this rim D^2 forms the curved arms D^1. By forming the arms in this manner there is no danger of their becoming detached from the back, as is liable to be the case where the arms are formed independent of the back and attached to the same by screws or nails. These arms D^1 pass through the orifices c^1 of the arms C, and hold the back at any desired inclination by means of the thumb-screws c^2. E is the foot-rest, which is pivoted to the front of the seat A, and curved, as shown in the drawings. E^1 is a secondary foot-rest, secured in the foot-rest E by means of pivot-pins, which work in the holes *e e* in the sides of the foot-rest E. By means of these pivot-pins and the holes *e e* this secondary foot-rest E^1 can be moved up or down in the foot-rest E, so as to accommodate itself to the length of the limbs of the child, and when raised up is held in position by means of the curved brace-arms *e′ e′*, secured to the back, as shown in Fig. 2. Being pivoted, it can be laid flat down on the bottom of the foot-rest E, when the back is thrown down for the purpose of allowing the child to recline. E^2 is a curved arm, which is pivoted to the bottom of the foot-rest E and underneath the same. The free end of the curved arm passes through a hole in a short arm, *b*, which is secured to the front cross-bar B, the foot-rest E being held in any desired position by means of the thumb-screw *b′*, which fastens the curved arm E^2. The other end of this arm *b* is bifurcated. F F are the wheels, and F^2 F^2 the couplings of the running-gear of the carriage. To the front axle F^1 is attached one end of the front springs G, the other end being secured to a cross-bar,

G′, which is provided at its center with a screw, *g*, over which passes the bifurcated portion of the arm *b*, said arm being held in position by means of the nut *x*, whose screw-threads mesh with the threads cut on the screw *g*. To the rear end of the couplings F^2 F^2 of the running-gear is attached a cross-bar, from each end of which extends upright arms. To the upper section of the upright arms are journaled the hind wheels. These hind wheels being so much larger than the front wheels, this or some similar arrangement of mechanism is necessary to equalize the difference between their respective diameters. To the rear of the couplings F^2 F^2 is attached one end of the rear springs H. These springs H are curved in the form shown in the drawing, and have pivoted to their other end the arms *h* of the rear cross-bar H′. On the cross-bars G′ H′ rest the rockers B′ of the chair. The formation of these rear springs and their mode of attachment allow a very easy motion to the child's carriage, the springs having a free motion, and allowing free scope for a full and complete action of all the flexible qualities of the same. W is a strap, which passes around the rear cross-bar H′, and through a loop, W′, attached to the rear cross-bar B, and by means of which the rear of the chair is secured to the running-gear of the carriage. Of course, any convenient substitute may be used for the strap. When it is desired to convert the carriage into a rocking-chair, the nut *x* is unscrewed, and the strap W unfastened, and the chair lifted off the cross-bars G′ H′. To convert the chair into a carriage, the operation is reversed. K is the handle, attached to the rear axle, by means of which the carriage is pushed along.

I am aware that a chair having a hinged back and curved slotted rods connecting the back with the arms of the chair, whereby the back can be adjusted, is not new, and I therefore do not claim such construction; but

What I do claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a child's chair, the hinged back D, having a rim, D^2, formed with curved extensions D^1, which pass through orifices in the arms, and are held by set-screws, as described, whereby the back can be adjusted, as set forth.

2. In a child's chair, the combination of the seat A^1, the pivoted foot-rest E, having the holes *e e* and the adjustable secondary foot-rest E^1, the pivoted curved arm E^2, and the arm *b*, having an orifice and thumb-screw, *b′*, substantially as described.

3. In a child's chair, the adjustable back D, curved arms D^1, seat A^1, arms C, adjustable foot-rest E, pivoted curved arm E^2, arm *b*, thumb-screws *b′* c^2, legs A, and rockers B′, the whole constructed, combined, and arranged substantially as described.

4. A child's chair consisting of the seat A^1, adjustable back D, foot-rest E, and rockers B′, all constructed as described, in combination with the curved springs H and running-gear, substantially as described.

5. In a child's chair and carriage, the curved springs H, formed as shown, cross-bar H′, having arms *h* pivoted to said springs, and strap W, the whole constructed and arranged to connect the rear of the chair with the running-gear of the carriage, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JEROME F. DOWNING.

Witnesses:
HOMER M. HILL,
F. E. JOSSELYN.