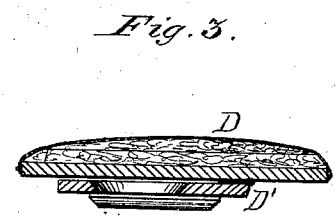
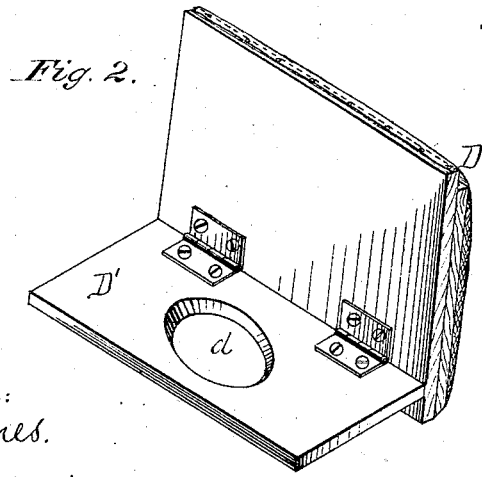
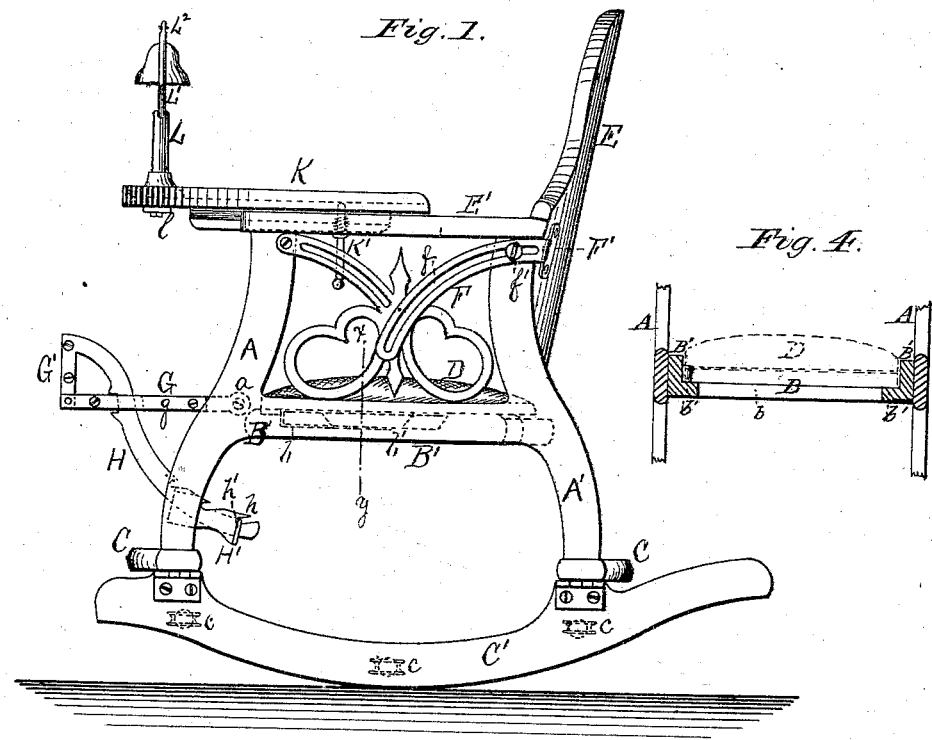


J. F. DOWNING.
Nursery Chairs.

No. 166,079.

Patented July 27, 1875.



Witnesses:
 Edwin James.
 John R. Jones.

Inventor:
 Jerome F. Downing.
 per J. E. J. Holmead,
 Attorney.

UNITED STATES PATENT OFFICE.

JEROME F. DOWNING, OF ERIE, PENNSYLVANIA.

IMPROVEMENT IN NURSERY-CHAIRS.

Specification forming part of Letters Patent No. 166,079, dated July 27, 1875; application filed March 10, 1875.

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 certain Improvements in Children's Chairs, 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. Fig. 2 is a perspective view of the seat, the cushion being raised. Fig. 3 is a sectional view of the seat, through the center thereof. Fig. 4 is a transverse vertical sectional view on line *xy*, Fig. 1.

The nature of my invention consists in constructing a chair with a foot-rest, which is so arranged as to be adjusted, and is retained and held at any desired position by means of arms provided with ratchet-teeth or recesses, and which engage in stirrup-shaped bearings, secured to the inner faces of the front supports of the frame or legs of the chair. The teeth on the ratchet-arm are so arranged that when the foot rest is adjusted and the arms fastened it is impossible for any movement of the child to disengage them, which is positively essential in a chair of this character.

My invention also consists in constructing a chair having an adjustable foot-rest, such as just referred to, with a swinging back arranged to be adjusted to any desired angle, and there securely held by means of slotted curved arms and thumb-screws, the latter having their socket-bearings in the rear vertical supports of the frame.

My invention also consists in constructing the chair with a detachable seat, to which is hinged at its lower face, and at the rear section thereof, a leaf provided with a suitable opening for the child to use in connection with a nursery-vessel, the same being so arranged that when the seat is thrown down the leaf and its opening shall be entirely concealed, but when the seat is thrown up it shall fall back and rest at such an angle as to provide a comfortable support for the child's back while seated on the opening in the leaf.

The construction and operation of my invention are as follows:

A A are the front and A' A' the rear legs and arm supports of the chair, and are con-

nected by cross-bars B B' at or near their center, which constitute the supporting-frame for the seat and its hinged leaf. These cross-bars B B' constitute an open and unobstructed frame-work when the seat is removed, and serve to support or steady the child in its movements when the rocking-chair is converted into a walking-chair. The legs A A and A' A' are seated on or secured to horizontal cross-bars C C, to which are hinged rockers C' C', which have secured on their inner face casters or rollers *c c*, which permit of the chair being used as a rocking-chair, and then, simply by throwing up the rockers C' C' so that their outer surface shall bear against the projecting sections of the cross-bars C C, of its being converted into a chair provided with casters, and which, in connection with the feature of the detachable seat, provides a most admirable chair or device for a child learning to walk, as it can support itself in the open frame which the cross-bars B B and B' B' provide, and by means of the casters readily push the chair along. This construction of chair-frame is in all respects precisely similar to that described in my former patents. D is the detachable seat and may be cushioned. On its under face, and at the rear portion thereof, is hinged a leaf, D', which is provided with an opening, *d*. This seat D, when in position in the chair, is supported by the leaf D', resting on bearings *b b'*, which are provided at the inner face of the front horizontal cross-bar B and the longitudinal cross-bars B' B', as clearly shown in dotted lines, Figs. 1 and 4. These bearings are relatively so arranged in connection with the cross-bars to which they are attached that when the leaf D' is seated or secured on said bearings its upper surface shall be flush with the face of the cross-bars, which permits the front projecting edge of the seat D to fall and rest on the front cross-bar B when the same is thrown down. The seat and its leaf being in the position shown in Fig. 1, the leaf is entirely concealed from view. But when occasion requires that the child should use the opening in the leaf in connection with a nursery-vessel, the seat is simply thrown up, and its hinged attachments permit it to fall back to a suitable angle to provide a comfortable

and desirable support for the child's back while it is seated on the opening *d*. *E* is the back of the chair, and is secured at its lower portion either to the rear supports *A' A'* or to the cross-bar *B*, either by hinges or pivot-joints, in such manner as to allow of its free swinging movement. *F F* are two curved arms, which terminate in elbow-shaped bearings *F' F'*, by means of which they are attached to the rear surface of the back *E*, and which, at the same time, permits of the free movement of the main section of the arms *F F* over the outer surface of the rear supports of the chair, and on a line parallel with the outer surface. These arms *F F* are slotted throughout their entire main section, as shown at *f*, which slots, in connection with the thumb-screws *f' f'*, which are secured and work in socket-bearings provided in the rear supports *A' A'*, permit of the back being adjusted to and held at any desired position. The foot-rest consists of two pieces, *G G'*, arranged at right angles to each other, and pivoted together. Along the lateral faces of the plate *G* extend arms *g g*, which are pivoted at *a a* to the inner surface of the front supports *A A* of the chair. *H H* are two arms of a double reverse curve or ogee form, and are secured by right-angle bearings to the sides of the board *G'*. These arms are also secured to the board *G*, and their lower curves are notched or recessed, as shown at *h h*, which provides, as it were, ratchet-bearings. These arms extend down under the chair, and work through stirrup-shaped bearings *H' H'*, whose upper bearing-surfaces *h' h'* can readily be caused to engage with either of the teeth or notches *h h* in the ratchet-arms *H H*. Thus it will be seen that the foot-rest *G G'* is not only adjustable, but it can also readily be so adjusted as to be secured and held in any desired position. It will also be seen that, owing to the form and arrangement of the teeth *h h*, when the nurse or other attendant adjusts the foot-rest and causes the teeth to engage in their bearings, a ratchet-and-pawl fastening, as it were, is provided, and one which no pressure or thumping of the child's feet on the rest will disengage. The foot-rest, when free, provides a support for the lower limbs and feet of the child, and owing to its adjustability is susceptible of being thrown up and held in the position shown in Fig. 1, and, when in such position, to convert the chair into a lounge you simply have to loosen the thumb-screws *f' f'* and let the back swing down on a line with the foot-rest and seat *D*. *K* is a

sliding table, and has parallel rabbeted bearings on its lower surface, which pass over and work on the inner surfaces of the arms *E' E'* of the chair. *K'* is a spring-bolt, and works in a suitable socket-bearing provided in one of the arms *E'* of the chair, and engages with a series of openings arranged along the under surface of the table *K*. By this arrangement the table can readily be detached at pleasure, or caused to slide and be automatically fastened at any desired position on the arms of the chair. At the front of the table is a mortise, in which the post *L* is secured and fastened by means of a screw-thread and nut, *l*. This post *L*, at its upper section, is provided with branch arms *L¹ L¹*, to which are secured a rubber cord, *L²*, on which are hung two or more bells. By striking the cord the bells are jingled, which provides an exceedingly simple means of amusing the child. This post *L* can be detached at pleasure simply by unscrewing the nut *l*.

From the foregoing full and detailed description the uses under various conditions of which my chair is susceptible will readily suggest themselves.

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

1. The leg-rest *G*, secured by pivot-bearings to the frame of the chair, foot-rest *G'* pivoted to said leg-rest, and having arms *H H* rigidly attached thereto, the latter being provided with ratchet-teeth *h h* and adapted to slide in the stirrup-bearings *H' H'*, the whole being combined and arranged to operate substantially as described.

2. In combination with the chair-frame, the detachable seat *D* and hinged leaf *D'*, having an opening, *d*, the whole being constructed and arranged substantially as described.

3. The leg-rest *G* secured by pivot-bearings to the frame of the chair, foot-rest *G'* pivoted to said leg-rest, and having arms *H H* rigidly attached thereto, the latter being provided with ratchet-teeth *h h*, and adapted to slide in the stirrup-bearings *H' H'*, in combination with a seat and swinging back, the whole being arranged to permit of the parts being adjusted and fastened in the manner and for the purpose set forth.

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

JEROME F. DOWNING.

Witnesses:

H. M. HILL,
H. CATLIN.