C. P. KENNA.

CONVERTIBLE CHAIR.
No. 365,523.
Patented June 28, 1887.


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# United States Patent Office. 

CHARLES P. KENNA, OF CHICAGO, ILLINOIS.

# CONVERTIBLE CHAIR. 

SPECIFICATION forming part of Letters Pa乞ent No. 365,523, dated June 28, 1887.

Application filed February 4, 1887. Sorial No. 226,523. (No model.)

To all whom it may concerru:
Be it known that I, Charles P. Kenna, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illi-
5 nois, have invented certain new and useful Improvements in Convertible Cbairs, of which I do declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming part of $o$ this specification.

My present invention, while capable in part of general application to that class of chairs which are designed to be converted from low chairs into high chairs, is more especially ap5 plicable to the class of chairs now commonly known in the trade as "combined high chairs and carriages," in which provision is made whereby the chairs can be converted into high chairs for use at tables or can be transformed o into low carriages adapted to be readily trundled.

The object of my invention is, first, to provide an improved form of connection between the chair-seatand its supporting-legs whereby, ${ }^{2}$ in the operation of lowering the chair from one position to another, the seat will be maintained at a level position, and, secondly, to provide improved means for connecting with the legs of the chair the whecls whereby the 0 chair will be sustained when converted into a carriage. These several objects I have accomplished by the novel features of construction hereinafter described, illustrated in the accompanying drawings, and particularly defined in the claims at the end of this specification.

Figure 1 is a view in side elevation showing my improved chair in position to form a child's high chair. Fig. 2 is a fractional view 40 in vertical section on line $x x$ of Fig. 1. Fig. 3 is a view in side elevation showing the position of the parts when the seat of the chair is lowered to form a trundling-carriage. Fiy. 4 is a view in vertical longitudinal section through the center of the chair with the parts in the relative position shown in Fig. 3. Fig. 5 is a detail view of the cam-block on the under side of the swinging extension.

A designates the main seat-frame of the chair, which may be provided with the usual or suitable arms, $A^{\prime}$, and, in case the chair is
used for nursery purposes, with a swinging table, $\mathrm{A}^{2}$, pivotally connected, as at $a$, to one of the side arms; and from the seat $A$ rises the back $\mathrm{A}^{3}$, which is extended upwardly and back wardly a sufficient distance to form a convenient handle to be used for trundling the chair when converted into a carriage, as shown in Fig. 3.

To the chair-seat A, and preferably upon the 60 under side thereof, are affixed the rails $B$, having tongues $b$, adapted to enter corresponding grooves in the extensible arms C , which are sustained by and slide upon these rails. - Between the extensible arms C extend the cross bars $c$ and $c^{\prime}$, the shorter of these bars being preferably arranged so that the ends shall bear against the inner sides of the arms C, while the lower and longerbar, $c^{\prime}$, is affixed to the under sides thereof.

To the front end of each of the extensible arms $C$ is suitably connected, as by a pivot pin, $c^{2}$, the upper ends of the rear legs of the chair, the lower ends of these legs being adapted to rest upon the floor when the chair is in high position. These rear legs, D, are pivotally connected, as at $d$, with the front legs, E , the upper ends of which are pivoted to the chair-seat, as at $e$, near its back.

Between the extensible arms $C$ is pivotally $S$ hung, as at $f$, the swinging extension $F$, the lower end of which has affixed thereto the footrest $F^{\prime}$, and the ander side of the extension $F$ is preferably provided with a suitable camblock, $f^{\prime}$, adapted to bear upon and be lifted by the cross-bar $d^{\prime}$, extending between the legs D, near their upper ends. This cam block $f^{\prime}$ is pivoted to the extension $F$ by means of the headed pin or screw $f^{2}$, and at its opposite end is provided with a slotted lug, $f^{3}$, adapted to swing over the headed pin $f^{4}$ and hold the camblock in position.

Each of the front legs, $E$, is provided at its upper portion with a standard, $\mathrm{E}^{\prime}$, at the lower end of which is carried the axle $G$ of a large 9 wheel, $\mathrm{G}^{\prime}$, such axle being held in position by means of a suitable threaded bolt, $g$, upon the inner end thereof. It will be readily understood that, if preferred, a single axle extending through both standards $\mathrm{E}^{\prime}$ may be used for roo these wheels. Near the lower ends of the front legs, E , are placed the small wheels $H$, these
wheels being connected with the legs in a manner similar to the wheels $G^{\prime}$ or by a single axle, as preferred; and the legs E and D may be braced by suitable cross-bars, such as shown 5 at $e e^{\prime}$ and $d^{2} d^{3}$.

From the foregoing description it will be seen that when the various parts of my improved chair are in the relative position shown in Fig. 1 a high chair will be formed, the upon the floor, while the ends of the front legs, E , will be raised therefrom by the wheels H , and at such time the foot-rest $F^{\prime}$ will be in convenient position for the feet of the child. parts will be securely retained in position by means of the guard-pin $c^{3}$, which projects upwardly from the bar $c$ and engages with the holes in a suitable spring-stop, I, which, as
20 shown in the drawings, is hinged at $i$ to the frontbar of the seat, extends beneath the same, and is held in position by the pin $I^{\prime}$, a spring, $1^{2}$, being employed, if desired, to force the bar I in downward direction. If, now, it is de5 sired to convert the high chair into a carriage, it is only necessary to lift the guard-bar $I^{2}$, thereby permitting the front and rear legs to turn about their pivot-connection $d$ and spread, during which operation the extensible arms C will be drawn by the legs D forward and outswinging extension $F$, with the foot-rest $F^{\prime}$, will be lifted upward, and this movement will continue until the wheels $G^{\prime}$ rest upon the floor and the lower ends of the legs $D$ are lifted therefrom.

It will be observed that during this operation of converting the chair into a carriage the chair-seat has been retained at a level position,
fo so that all danger of the occupant slipping therefrom is avoided. It will be understood, also, that when the chair is to be again converted into a high chair it will be only necessary to lift the seat until the several parts as-
45 sume their relative positions. (Shown in Fig. 1.) By providing the chair seat with the extensible arms C, pivotally connected with the legs D , not only am I enabled to more readily and conveniently change the chair from one
5o position to another, but am also enabled to arrange the extension $F$ in such manner that it will be automatically swang upward, if desired, to form a continuation of the chair-seat, so as to permit the occupant to more readily
55 assume a reclining position. By sustaining both sets of wheels upon the legs E , I am enabled to use a large and a small set of wheels, so as not ouly to give to the chair an appearance more nearly like that of an ordinary
50 child's carriage, but also to bring the wheels into better position with respect to the body of the chair and where they will be less in the way of the person trundling the same. An advantage incident to the arrangement of the
65 legs $D$ in the manner shown is that when the chair is in the position to form a carriage the
lower ends of these legs extend to a point behind the large wheels and near the ground, so as to avoid all danger of the backward tipping of the carriage.

It will be readily seen that if it is desired to have the occupant of the chair assume a sitting position when the chair is lowered to form a carriage, it is only necessary to turn the camblock $f^{\prime}$ upon the pivot-pin $f^{2}$, so as to permit the swinging extension $F$ to drop until it rests against the cross-bar $a^{\prime}$, between the legs D .

If desired, the upper ends of the front legs, E, may be extended backward and upward, as shown by the dotted lines in Fig. 3, so as to form a suitable handle whereby the carriage may be trunded. In case this extension of the front legs is made the back $\mathrm{A}^{3}$ of the chair need not extend above the ordinary distance for such chairs.

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

1. In a convertible chair, the combination, with the seat-frame, of the front legs pivotally connected therewith near the back, the extensible arms connected with the seat-frame in a manner free to slide, and the rearlegs pivotally connected to the extensible arms and the front legs, substantially as described.
2. In a convertible chair, the combination, with the seat-frame, of the front legs pivotally comnected therewith near the back, the extensible arms arranged to slide lengthwise of the seat-frame, the rear legs pivotally connected with the extensible arms and with the front legs, and a swinging extension connected with said arms, substantially as described.
3. In a convertible chair, the combination, with the seat-frame provided with rails, of the I ; extensible arms arranged to slide upon said rails, the swinging extension pivoted to said arms, the front legs pivoted to the seat-frame near its back, and the rear legs pivoted to the frontlegs and to the extensible arms and provided with a suitable stop or bar for lifting the swinging extension, substantially as described.
4. In a convertible chair, the combination, with the seat-frame and with its extensible arms, of the frout and rear legs pivoted, respectively, to said frame and arms and to each other, one set of said legs being furinished with wheels at each side of its joint with the companion set of legs, substantially as described.
5 . In a convertible chair, the combination, with the seat-frame and with its extensible arms, of the front and rear legs pivoted, respectively, to said frame and arms and to each other, said front legs being provided near their lower ends with a set of small whecls and in their upper portions with a set of wheels of larger diameter, substantially as described.

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Witnesses:
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Janes M. Peirce.

