

(No Model.)

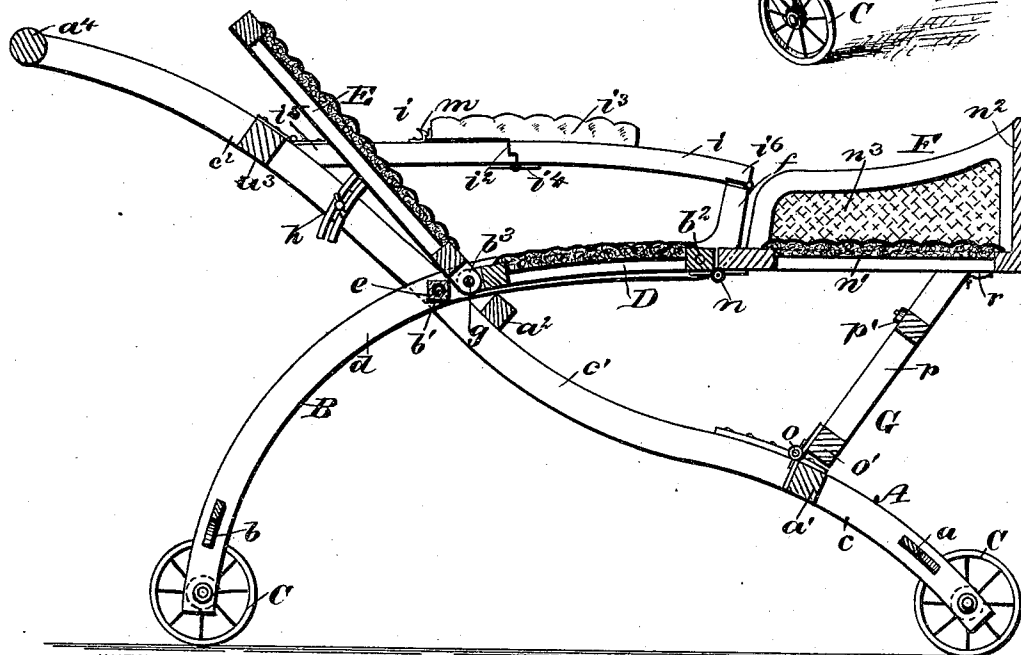
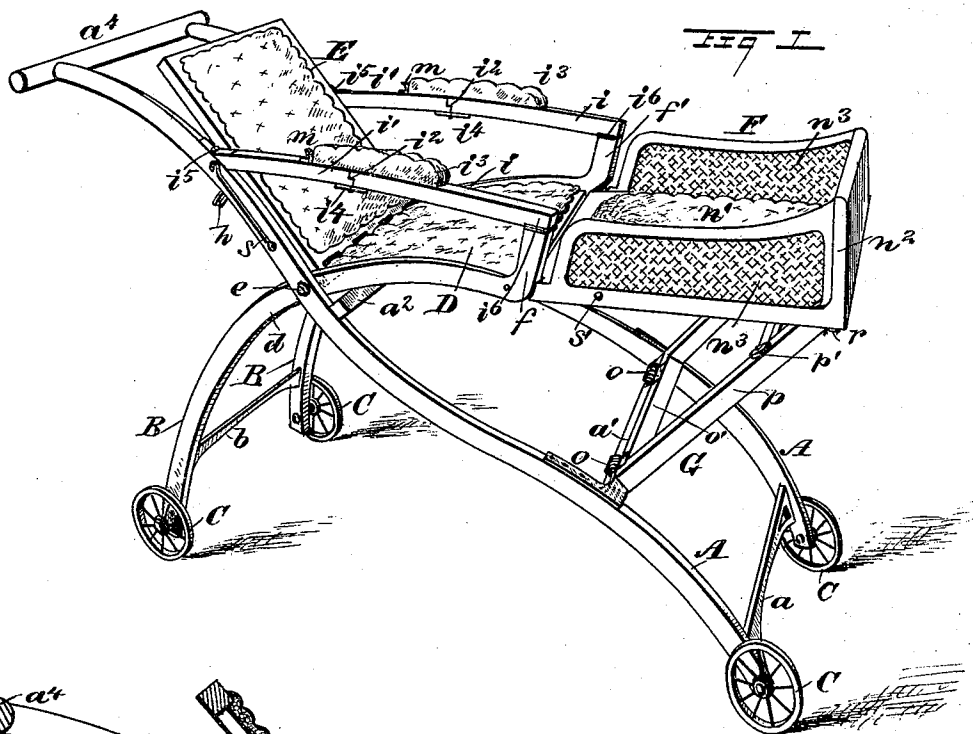
2 Sheets—Sheet 1.

A. RUDOLPH.

COMBINED ROLLING CHAIR AND CHILD'S CARRIAGE.

No. 461,276.

Patented Oct. 13, 1891.



WITNESSES:

H. Walker
C. Sedgwick

INVENTOR

BY

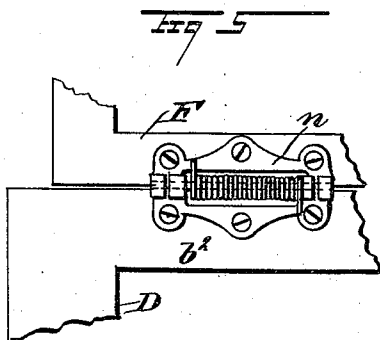
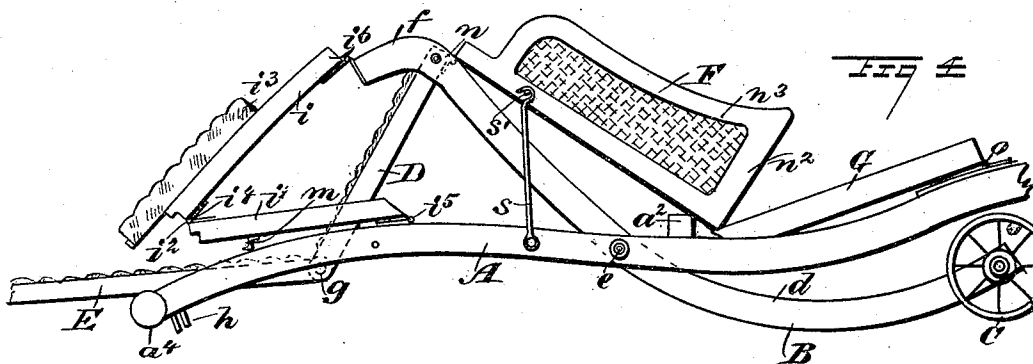
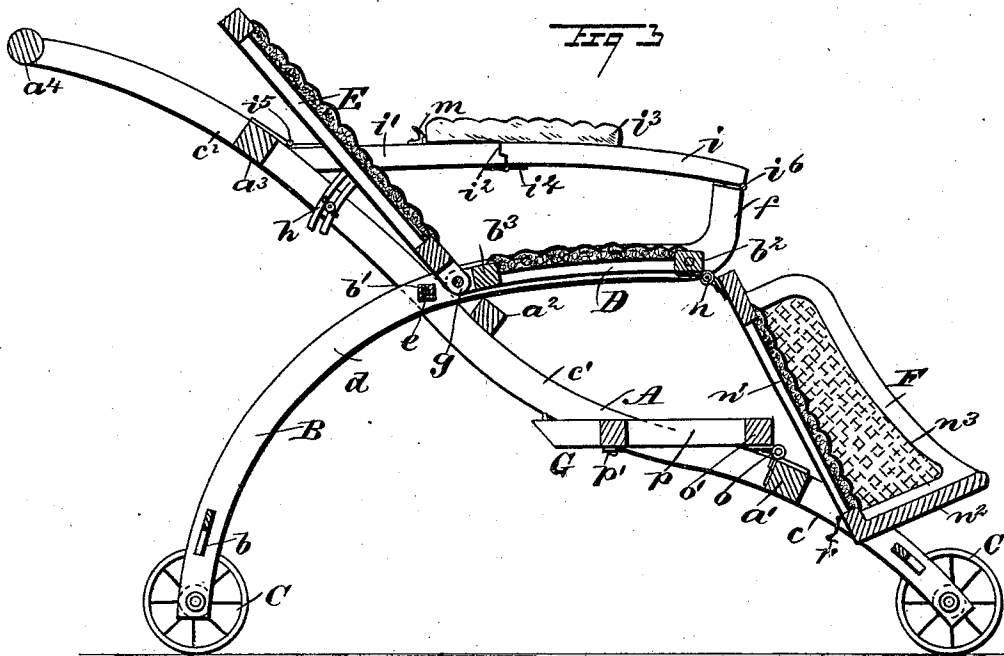
A. Rudolph
Munn Hc

ATTORNEYS,

2 Sheets—Sheet 2.

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H. Walker
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UNITED STATES PATENT OFFICE.

ALBERT RUDOLPH, OF NEW YORK, N. Y.

COMBINED ROLLING CHAIR AND CHILD'S CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 461,276, dated October 13, 1891.

Application filed August 3, 1891. Serial No. 401,545. (No model.)

To all whom it may concern:

Be it known that I, ALBERT RUDOLPH, of New York, in the county and State of New York, have invented a new and useful Combined Rolling Chair and Child's Carriage, of which the following is a full, clear, and exact description.

The object of this invention is to produce a compact, light, strong, and shapely device which may be quickly converted into a child's carriage or a rolling chair for an invalid, and when not in service be closely folded for convenient transportation and stowage.

To this end my invention consists in the peculiar construction of parts and their combination, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the device, showing its parts adjusted to produce a child's carriage. Fig. 2 is a longitudinal section of parts adjusted as shown in Fig. 1. Fig. 3 is a longitudinal section of the device having its parts adjusted to form a rolling chair. Fig. 4 is a side view, broken at one end, showing the parts in a folded condition; and Fig. 5 is an enlarged broken detail view showing a spring-hinge preferably used to connect some parts of the device.

The frame of the vehicle consists of two sets of legs A B, which are held spaced apart parallel in pairs, respectively, by cross-bars $a a'$, $a^2 a^3$, and $b b'$. The legs A A are preferably bent edgewise and oppositely at three points $c c' c^2$, thus affording a shapely design and adapting them to fold closely with other parts. The remaining pair of legs B B are each given a single curve, as at d , these legs being proportionately spaced apart to locate them between and in lateral contact with the legs A, to which they are pivoted by a cross-bolt e , which longitudinally penetrates the cross-bar b' . As represented in Figs. 1, 2, and 3, the portions of the legs A B that extend below the pivot-bolt e are spread sufficiently to afford a stable support for the weight they sustain, and on the lower end of each leg a wheel C is pivotally secured. Above the pivot-bolt

e the pair of legs B are forwardly-extended when the device is adjusted for service, the front end portions of said extensions being bent upwardly, as at f in Figs. 2 and 3.

A seat-frame D is provided which is rectangular and has its front cross-bar b^2 pivotally attached to the legs B, near their short upright limbs f , which connection of parts stiffens the frame-section composed of the legs B and cross-bars $b b'$. The side pieces of the seat-frame D are extended a short distance rearward of the rear cross-bar b^3 to provide ears, between which the lower ends of the cushioned back-frame E are pivoted, as at g , which frame is extended rearwardly and upwardly when the vehicle is in use, and is secured at any desired angle of inclination from the seat by the clamped attachment of similar curved and slotted arms h upon each of the legs A by screws or other means. Said leg portions extend upward and rearward from the pivot-bolt e when the frame of the vehicle is spread for use and provide means for its propulsion, a transverse handle-bar a^4 , that is secured to the terminal ends of these leg portions, being adapted for this purpose. Two arm-rests are furnished for the device of like construction, each consisting of two pieces $i i'$, that are lap-jointed and hinged together at i^2 on their lower sides, so as to flex upwardly and become firm arm-rests when extended, as shown in Fig. 2, there being a cushioned re-enforce strip i^3 attached to each of the forward pieces i , which strips have a close bearing upon the rear pieces i' , when the arm-rests are extended and prevent improper strain on the hinges i^4 . The rearward ends i^5 of the arm-rest pieces i' are hinged to the upper portions of the frame-legs A, so as to yield upwardly when the parts are to be folded, and abut upon the edges of said legs with their sloping ends when the arm-rests are extended for use. The front ends i^6 of the arm-rest portions i are hinged upon the upper ends of the legs B, so as to flex upwardly when the parts are to be given the adjustment shown in Fig. 4, and thus adapt the vehicle for compact stowage when out of service.

A preferred means for detachably holding the two portions of each arm-rest extended is shown in Figs. 2 and 3, consisting of a spring-

catch m for each rest, which is attached to the upper surface of the piece i' and latches fast to a detent-lip on the end of the re-enforce strip j^3 , the release of said catches being effected by pushing their latch-heads away from the lips they lock upon.

Forwardly of the seat-frame D a foot-rest F is located, having its rear portion hinged on the lower side to the front cross-bar b^2 of the seat-frame, spring-hinges n being preferably used for said connection of parts, the construction of which is shown in Fig. 5. The strength of the springs on the hinges n should be sufficient to throw the foot-rest F up into the position shown in Figs. 1 and 2, when the latter is free to move. Preferably the foot-rest is cushioned, as at n' , and has a base-board n^2 at right angles to the cushioned side of the same, the latter portion forming an extension of the seat-frame D when the parts are adjusted, as shown in the figures last mentioned. Side pieces n^3 of the foot-rest, which are made to align with the arm-rests previously described, complete an inclosing-body for the device when it is to be used as a child's carriage.

When the parts are to be adjusted, as just described, the foot-rest F is sustained in a horizontal position by a prop-frame G, which consists of a rectangular frame having its lower transverse bar hinged to the legs A, spring-hinges o , similar to the hinges n , being preferably used for the attachment of parts.

The spring-hinges o have their leaves affixed to the prop-frame bar o' and the cross-bar a' , and are adapted to exert the tensional force of their springs to project the prop-frame G away from the legs A, upon which said frame may be manually folded, the latter-mentioned adjustment being secured by turning the button p' , that is pivoted on the prop-frame leg p , in an outward direction, so that its projecting portion will catch below the adjacent leg A and retain the prop-frame until released, thus preventing a rattling vibratory movement of the latter when the vehicle is changed from a child's carriage into a rolling chair for the easy transportation of an adult invalid or like purpose. When the parts are relatively disposed to affect such an adjustment, the foot-rest will be downwardly and outwardly inclined, as shown in Fig. 3, the base-board n^2 then assuming a correct position for the support of the feet of the occupant.

To adjust the device for use as a child's carriage, the legs A B are spread apart until the seat cross-bar b^3 strikes upon the leg-frame cross-bar a^2 , which will limit the divergence of the pairs of legs, the springs of the hinges o by their torsional force throwing the prop-frame upwardly and outwardly, so that the upper end of said frame will impinge upon the lower side of the foot-rest to which it is automatically locked by spring catches or hooks r .

When the device is to be folded up, as represented in Fig. 4, the pairs of legs A B are rocked on their pivot-bolt e , so as to bring their lower ends close together, the arm-rests are flexed, as shown, and the back and seat frames, together with the foot-rest, are disposed, as indicated, the back-frame folding upon the handle-bar a^4 , and the lower end of the foot-rest bearing upon the cross-bar a^2 and upper end of the prop-frame, all these parts being secured in a folded condition by a hook s , that is pivoted on one of the legs A, and engages its hooked end with a stud s' on the side of the foot-rest.

The folding of the vehicle, as shown, facilitates its portage upon narrow stairways, and, furthermore, permits it to be stowed away without taking up floor-space, which is one of the valuable features of the invention.

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

1. In a combined chair and child's carriage, the combination, with two leg-frames pivoted to spread or fold, wheels thereon, and a back-frame pivoted between and held adjustably on one leg-frame, of a seat-frame pivoted to the back-frame, a foot-rest hinged to the front of the seat-frame, and a prop-frame, substantially as described.

2. In a combined rolling chair and child's carriage, the combination, with two leg-frames, one pivoted between the other, so as to spread or fold, wheels on the lower ends of the leg-frames, and a seat-frame pivoted at its front between the legs of the inner frame, of an adjustable back-frame pivoted below to the rear of the seat-frame, arm-rests, each hinged at their ends to the leg-frames and adapted to flex near their centers, a foot-rest hinged to the front of the seat-frame and folding below it, a prop-frame hinged by its lower end to the outer leg-frame, and a securing device for the upper end of the prop-frame on the foot-rest, substantially as described.

3. A combined rolling chair and child's carriage composed of two-wheeled leg-frames pivoted together near their longitudinal centers, so as to spread or fold, a back-frame pivoted between the leg-frames, clamps for the back-frame on the upper end of one leg-frame, a seat-frame pivoted to the back-frame near adjacent edges, and a foot-rest hinged to the front of the seat-frame and provided with an adjustable support, substantially as described.

4. In a combined rolling chair and child's carriage, the combination, with two leg-frames having legs bent to undulate edgewise, one frame pivoted between the other frame near their centers of length, and a wheel pivoted on each leg of the frames, of a seat-frame pivoted forwardly between the legs of the inner leg-frame, a back-frame jointed to the rear edge of the seat-frame by its lower end, an adjusting device between the outer leg-frame

and back-frame to limit its inclination, arm-rests hinged at their ends to the leg-frame and adapted to flex upwardly near their centers, a foot-rest spring-hinged to the front edge of the seat-frame, a prop-frame spring-hinged by its lower edge to the outer leg-frame, spring-catches for the arm-rests and

prop-frame, and a hook that is adapted to hold the device in folded adjustment, substantially as described.

ALBERT RUDOLPH.

Witnesses:

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C. SEDGWICK.