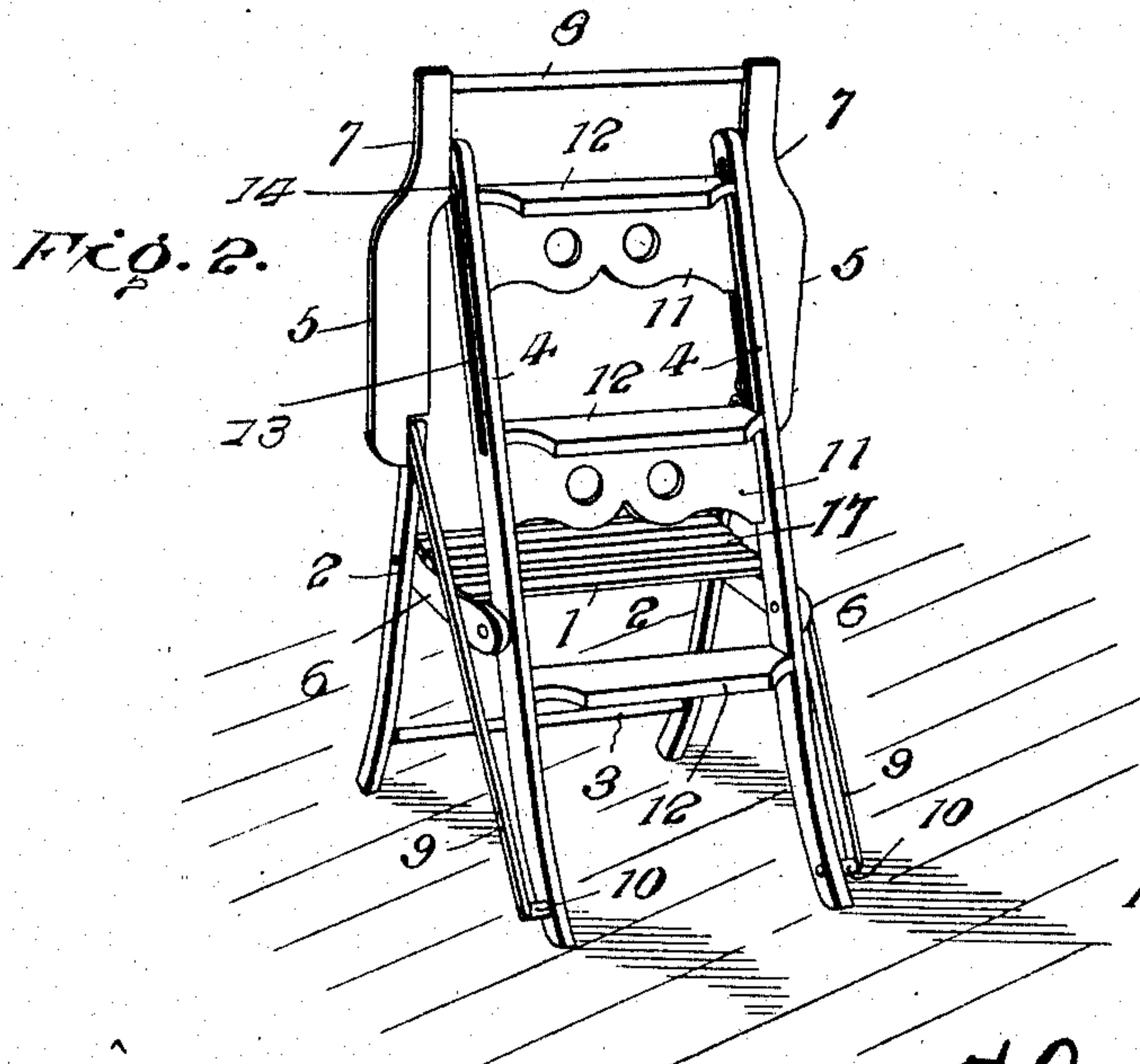
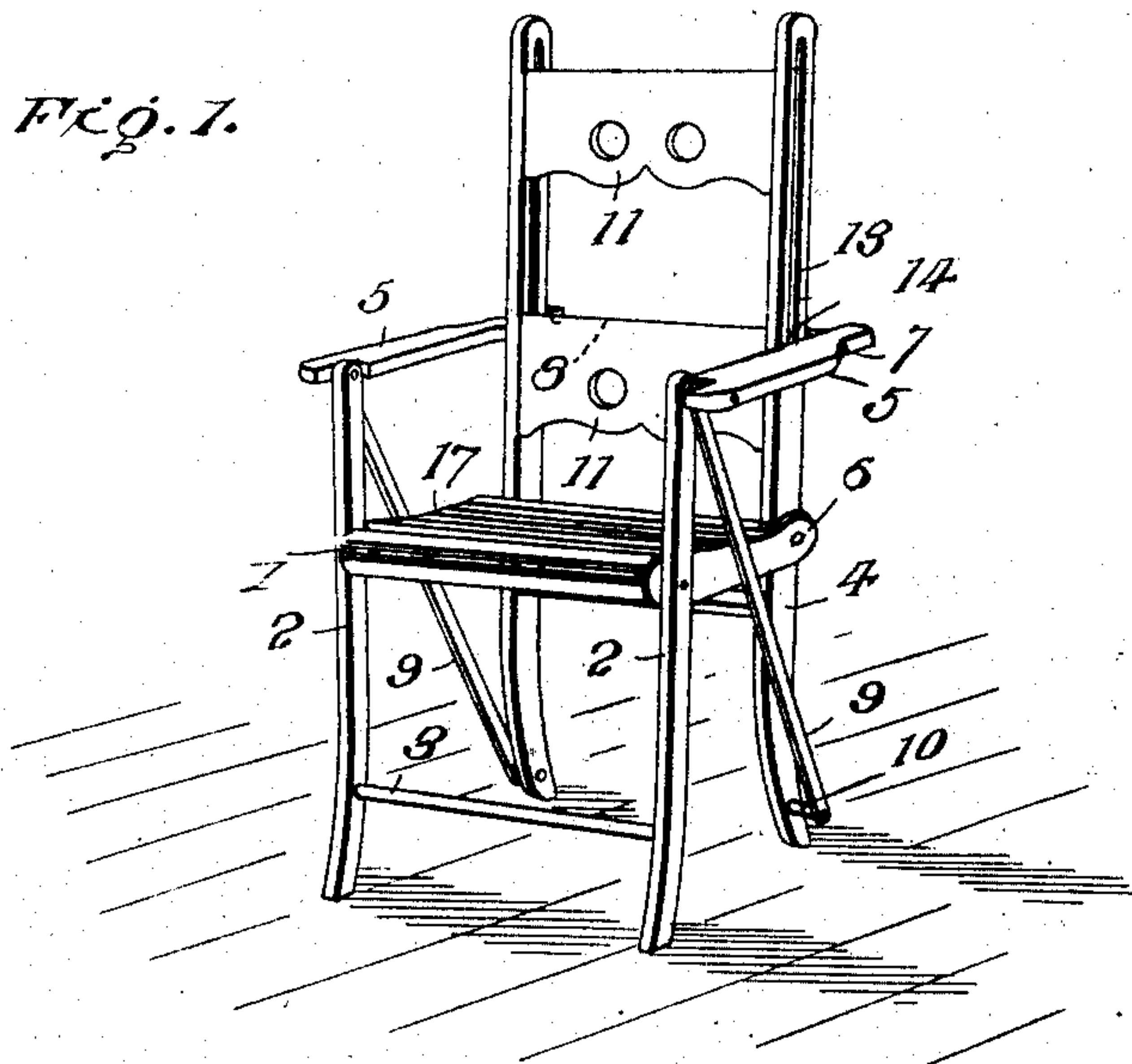


No. 864,401.

PATENTED AUG. 27, 1907.

H. S. WRIGHT.
CONVERTIBLE STEP LADDER AND CHAIR.
APPLICATION FILED MAR. 14, 1907.



Inventor
H. S. Wright,

Witnesses

W. M. M. M.
W. R. M. M.

By

R. M. M. M.
Attorneys

UNITED STATES PATENT OFFICE.

HENRY S. WRIGHT, OF MADRID SPRINGS, NEW YORK.

CONVERTIBLE STEP-LADDER AND CHAIR.

No. 864,401.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed March 14, 1907. Serial No. 362,401.

To all whom it may concern:

Be it known that I, HENRY S. WRIGHT, a citizen of the United States, residing at Madrid Springs, in the county of St. Lawrence and State of New York, have
5 invented certain new and useful Improvements in Convertible Step-Ladders and Chairs, of which the following is a specification.

This invention relates to a device which may be used either as a chair or a step-ladder, the same involving a
10 novel construction admitting of the ready conversion from one to the other according as the device is to be used for resting or for mounting to reach an elevated object.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different
20 forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment is shown in the accompanying drawings, in which:

Figure 1 is a perspective view of the device when arranged for use as a chair. Fig. 2 is a perspective view
25 showing the device adapted for use as a step-ladder.

The device comprises a rest 1 and front and rear pivoted sections. The front section comprises bars 2 which are pivoted between their ends to the front portion of
30 the rest 1 and which are connected near their lower ends by means of a cross piece 3. The rear section comprises bars 4 which are pivoted between their ends to the rear portion of the rest 1. The lower ends of the several bars 2 and 4 constitute legs of the chair, the rest
35 1 forming the chair bottom or seat. The upper portion of the bars 4 constitute supports of the chair back and the upper portions of the bars 2 support braces 5 which serve as arm rests of the chair as indicated most clearly in Fig. 1. The rest 1 consists of side bars 6 and trans-
40 verse connecting bars or slats 17, the side bars 6 being pivotally connected at their rear ends to the outer sides of the bars 4 and at their front ends to the inner sides of the bars 2, thereby throwing the front bars 2 and the rear bars 4 in different planes. The braces 5 are piv-
45 oted near their front ends to the upper ends of the bars 2 and have a sliding or running connection near their rear ends with the upper portions of the bars 4. The braces 5 are off-set near their rear ends as shown at 7 and extend a short distance in the rear of the bars 4 and
50 are connected by means of a cross piece 8. The braces 5 are notched at their inner forward corners to receive the upper ends of the bars 2 and stays 9, said stays extending diagonally to the lower ends of the bars 4 to which they are pivoted and held therefrom a short dis-
55 tance by spacing pieces 10, the length of the spacing pieces 10 corresponding to the combined thickness of the

bars 2 and 6 so that the stays 9 may not bind or rub against the side bars 6 of the rest 1. The upper portions of the bars 4 are connected by means of cross pieces 11
60 which form elements of the chair back. Tread pieces 12 are located at different points in the length of the bars 4 and extend rearwardly therefrom in an approximately horizontal direction and are spaced apart a convenient distance according to the required rise or lift between the treads. The tread pieces 12 act jointly with the
65 cross pieces 11 to properly space the bars 4, said treads being strengthened and stiffened by the cross pieces, thereby admitting of their being formed of comparatively thin material.

When the device is adjusted for use as a chair, the
70 several bars 2 and 4 occupy an upright position with the braces 5 approximately horizontal to provide arm rests. To convert the chair into a step-ladder, the rear ends of the braces 5 are moved upward, this being accom-
75 plished by gripping the cross piece 8 and pulling or pressing upward thereon. As the rear end of the braces 5 move upward, the upper ends of the bars 2 and 4 are drawn inward, thereby giving the proper inclination to the bars 4 to bring the treads 12 in proper
80 position.

When the device is converted into a step-ladder, the braces 5 and bars 2 form rear braces, the joint between them being fixed by the stays 9 which prevent the joint from either inward or outward displacement.

It will be observed that the provision of the notches
85 at the inner forward corners of the braces 5 result in shoulders which abut against the ends of the bars 2 and sustain the direct weight and strain when weight is placed upon the upper tread of the ladder, thereby relieving the pivot fastenings between the braces 5 and
90 bars 2 of the load and stress.

The step-ladder is quickly converted into a chair by gripping the cross piece 8 and moving the same downward, thereby causing the braces 5 to assume an ap-
95 proximately horizontal position with the result that the upper ends of the bars 2 and 4 are spaced apart. Slots 13 are formed in the upper portions of the bars 4 and receive pins 14 projected laterally from the inner edges of the braces 5, the slots 13 being of a length to limit the movements of the braces 5 in their predeter-
100 mined extreme positions.

Having thus described the invention, what is claimed as new is:

1. A vertical chair and step-ladder comprising a rest, front and rear bars pivotally connected between their
105 ends to opposite ends of said rest, and braces having pivotal connection at their front ends with the upper ends of said front bars and having sliding or running connection at or near their rear ends with the upper portions of the aforesaid rear bars.

2. In a convertible chair and step-ladder, the combina-
110 tion of a rest forming a chair seat, front and rear bars pivoted between their ends to the front and rear portions

of said rest, braces pivoted to the upper ends of the front bars and having sliding or running connection at or near their rear ends with the upper portions of the said rear bars, and a cross piece connecting the rear ends of said
5 braces to cause them to move together.

3. A convertible chair and step-ladder, comprising a rest, front and rear bars pivotally connected between their ends to opposite ends of said rest, and braces having pivotal connection at their front ends with the upper ends
10 of said front bars and having sliding or running connection at or near their rear ends with the upper portions of the aforesaid rear bars, and stays pivoted at their upper ends to the front bars and braces, and at their lower ends to the lower ends of the aforesaid rear
15 bars.

4. In a vertical chair and step-ladder comprising a rest, front and rear bars pivotally connected between their ends to opposite ends of said rest, and braces having pivotal connection at their front ends with the upper ends
20 of said front bars and having sliding or running connection at or near their rear ends with the upper portions of the aforesaid rear bars, said braces having their inner forward corners notched to receive the upper ends of the front bars and to form shoulders against which said bars
25 abut when the device is converted into a step-ladder.

5. The herein described convertible chair and step-ladder comprising a rest forming a chair bottom and comprising side bars and connecting slats, front bars pivoted between their ends to the outer faces of said side bars, rear bars pivoted to the inner faces of said side bars and
30 having longitudinal slots in their upper portions, stays connecting the upper ends of the front bars with the lower ends of the rear bars, and spaced from the latter, braces pivoted to the upper ends of the front bars and having sliding or running connection with the rear bars,
35 pins projected from said braces and entering the longitudinal braces and entering the longitudinal slots of the rear bars, treads at intervals in the length of the rear bars and extended outward therefrom, and cross pieces connecting the upper portions of the rear bars to form
40 elements of the chair back, the inner forward corners of the braces being notched to receive the upper ends of the front bars and stays.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY S. WRIGHT. [L. S.]

Witnesses:

E. B. SIMONS,

JAMES W. AITCHISON.