A. J. BERGER & M. ABRAHAM.

CHAIR.

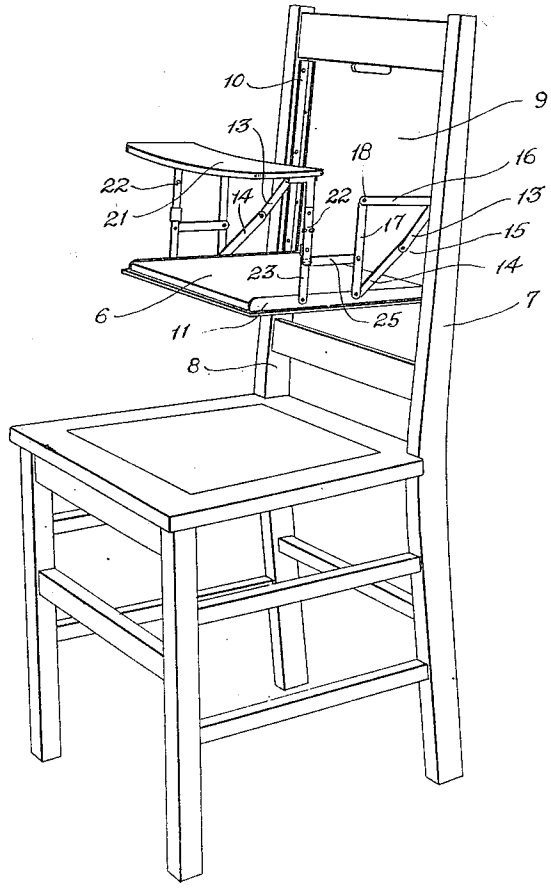
APPLICATION FILED JUNE 19, 1911.

1,034,678.

Patented Aug. 6, 1912.

2 SHEETS—SHEET 1.

Fig. 1.



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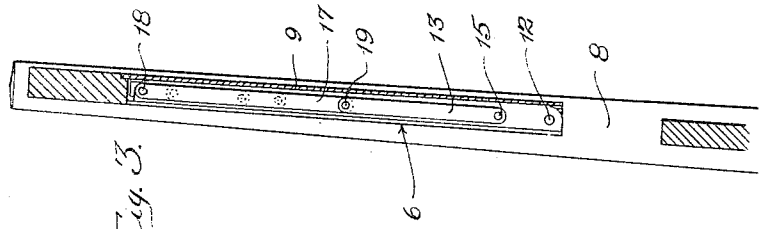


Fig. 3.

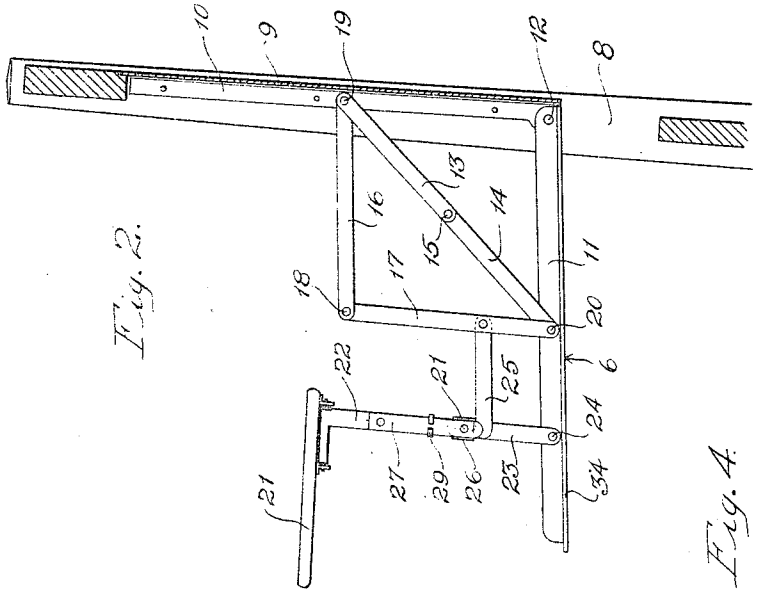


Fig. 2.

Fig. 4.

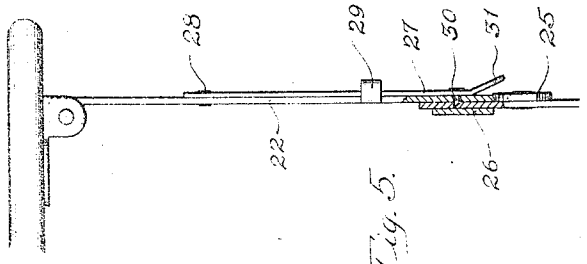
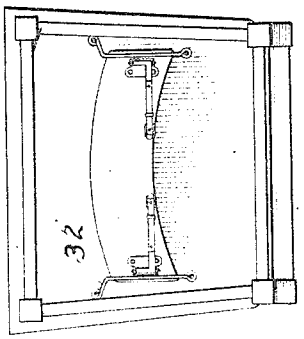


Fig. 5.



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UNITED STATES PATENT OFFICE.

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CHAIR.

1,034,678. Specification of Letters Patent. Patented Aug. 6, 1912.

Application filed June 19, 1911. Serial No. 633,939.

To all whom it may concern:

Be it known that we, ANTON J. BERGER and MAX ABRAHAM, both citizens of the United States, and both residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Chairs, of which the following is a specification.

This invention relates to a certain improvement in chairs, whereby it is possible to convert the back of the same into a small high chair such as would be adapted to the uses of a child.

It is intended that when used in the ordinary manner the back of the chair shall, in all important respects, resemble the back of an ordinary chair, but it is intended that the back shall be so constructed that a panel of the same may be pulled out or turned down so as to constitute the seat of the high chair.

In carrying out our invention, the parts should be so proportioned that when the device is used as a high chair it will have ample stability against overturning, and to this end the several parts are so arranged as to secure the maximum resistance against overturning.

Objects of our invention, in addition to those above enumerated, are: to so arrange the supports and braces which carry the foldable panel or member that they may at the same time constitute the arms of the high chair and provide a maximum degree of strength; to arrange the several parts in such way that a tray may be conveniently attached to or detached from the braces; to construct the tray in such manner that the same may be folded up and stowed away in any convenient location, as, for example, underneath the main seat of the chair; and in other ways and manners to provide a chair intended to meet all of the aforementioned as well as other requirements.

Other objects and uses will appear from a detailed description of the invention, which consists in the features of construction and combination of parts hereinafter described and claimed.

Referring now to the drawings, Figure 1 is a perspective view of an entire chair with the foldable member pulled down into working position and the tray attached to the same; Fig. 2 is an enlarged vertical section, taken through the upper portion of the back and showing the foldable member pulled down into working position, and the tray attached to the same; Fig. 3 shows an enlarged vertical section of the back, with the foldable member turned up into normal position so that the chair may be used in the ordinary manner; Fig. 4 shows a bottom view of the seat of the chair with the tray folded back and slipped into position underneath the same; and Fig. 5 shows an enlarged detailed vertical section of the clip for holding the arm of the tray in working position with respect to the foldable member.

In the embodiment of our invention, we provide a panel or other foldable member in the back of the chair proper, the same being so constructed that when rotated down into substantially horizontal position it may constitute the seat of the high chair, while when rotated up into its normal position it may constitute a portion of the back of the chair proper. This panel or foldable member should be so proportioned and constructed that it may act in the most efficient manner, as a panel of the back of the chair when used as such. We then provide one or more braces or brackets adapted to limit the downward movement or rotation of the foldable member, and adapted to constitute, either in themselves or in combination with other braces, the arms of the high chair. A removable tray is provided which may be readily inserted or attached in working position after the foldable member has been rotated down as above stated.

Referring now to the drawings, the foldable member or panel is designated by the numeral 6, and is suitably pivoted between the posts 7 and 8 of the chair. When this member is thrown up, as illustrated in Fig. 3, it constitutes a panel of the back of the chair, while when it is rotated down into the position in Figs 1 and 2, it constitutes the seat of the high chair. A fixed panel 9 is provided between the posts, the same constituting the back of the high chair and serving, in conjunction with the member 6, to inclose a space within which the braces fold when the foldable member is rotated up into the position shown in Fig. 3. In practice, the panel 9 should be comparatively thin, and to this end it may be formed of sheet metal if this be desired.

As before stated, the member 6 is hinged

or pivoted to the posts. In order to effect this connection in the most efficient manner, angles 10 may be provided in the corners between the posts and the panel 9. Angles 11, which face the sides of the foldable member, may then be pivoted to the angles 10, as shown in Figs. 2 and 3, at the points 12.

A pair of links 13 and 14 are provided on each side of the foldable member, and connect the same to the posts in such manner as to constitute braces for limiting the downward movement of the foldable member. Each pair of links is hinged together at the point 15, the link 14 being pivoted to the angle 11, and the link 13 to the angle 10. In addition to the aforementioned links, there may be provided a pair of bars 16 and 17 on each side of the foldable member and connecting the same with the corresponding post, the bar 16 being pivoted to the corresponding angle and the bar 17 to the corresponding angle 11 while the bars 16 and 17 are pivoted together at the point 18. In practice, the bar 16 and the link 13 should be pivoted at a common point 19 to the corresponding angle; also the bars 16 and 17 should be of such relative lengths that when the foldable member is thrown down to constitute the seat of the high chair they will act efficiently to provide an arm for the high chair. It is also preferred that the bar 17 and the link 14 should be pivoted to the angle 11 at a common point 20.

Any suitable construction may be used for supporting a removable tray when the foldable member has been thrown down as above stated. The preferred construction is one in which the tray 21 has pivoted to each of its ends an arm 22, which may be thrown down into a position substantially at right angles to the tray, as illustrated in Figs. 1 and 2. A link 23 on each side of the foldable member has one end pivoted to the corresponding angle 11 at the point 24, and is braced with respect to the corresponding bar 17 by means of a link 25. Each of the links 23 extends up a suitable distance above the corresponding bar 25, so that the corresponding arm 22 may be attached to its upwardly projecting end. Any suitable form of removable connection may then be established between each arm 22 and the corresponding upwardly projecting end, the preferred construction being that illustrated in Fig. 5. In this case, the arm 22 carries on its lower end a loop 26, which may snugly fit the corresponding upwardly projecting end. A leaf spring 27 is securely attached to the arm at the point 28, and is guided in its movements by fingers 29. Its lower end carries a pin 30 adapted to pass through the lower end of the arm and through the upwardly projecting end of the link 23, the pin being normally thrown inward, as illustrated in Fig. 5. A finger 31, formed on the lower end of the spring, facilitates the movement of the latter.

By releasing the pin 31 and raising the arms 22, the tray may be disengaged from the foldable member. The arms 22 may then be folded beneath the tray, which latter may then be slipped into place beneath the seat of the chair, where it may be held by means of wire brackets 32 or the like. The arms 22 should be pivoted to the tray at points inward from the ends thereof a sufficient distance to provide a surface 33 which may engage the brackets 32.

From examination of the above described construction, it is apparent that in order to effect the change from an ordinary chair to a high chair it is only necessary to rotate the foldable member from the position shown in Fig. 3 down into that shown in Fig. 2, and to then place the tray in working position. By reason of the several connections between the links and the bars, the same constitute an efficient form of arm for the high chair, and at the same time they act to hold the foldable member firmly in working position. It will be noticed, also, that the several parts are relatively so formed that they fold together within a remarkably narrow space, which fact is well illustrated in Fig. 3. For this reason, when the chair is to be used in the ordinary manner, it has exactly the appearance of an ordinary chair. From examination of Fig. 1, it will be seen that the foldable member has considerable thickness in its central portion. To accommodate the several links and bars within the minimum of space, the angles 11 are set inwardly a little way from the edge of the foldable member, thereby leaving a rib 34 of the same projecting outwardly. Thus there is provided sufficient space between the face of the angle 11 and the edge of the corresponding rib 34 to accommodate the links at that side of the foldable member. By pivoting the foldable member at the proper position with respect to the seat of the chair proper, the latter may be used as a foot rest for the child when seated in the foldable member.

While we have shown and described herein only one form of construction, it is apparent that many modifications and changes might be made, which, however, would not depart from the scope of our invention, inasmuch as we contemplate the use of any form of foldable member or the like in the back portion of the chair, the same being adapted, when folded up, to constitute a portion of the back of the chair, while, when rotated down, it may constitute the seat of the high chair.

We claim:

The combination with the rear posts of a chair or the like, of a pair of vertical mem-

bers secured to the inner faces of said posts, a foldable member having its lower end pivoted to the vertical members, a foldable link on each side of the foldable member, having its lower end pivoted to the side of the foldable member, and its upper end pivoted to the corresponding vertical member, a pair of foldable bars on each side of the foldable member, and having their adjacent ends pivoted together, and the upper bar being pivoted to the vertical member at the point of attachment of the foldable link, and the lower bar being pivoted to the foldable member at the point of attachment of the foldable link, a tray supporting link pivoted on each side of the foldable member, and a bracing bar having one end pivoted to the corresponding tray supporting link, and the other end pivoted to the corresponding foldable bar, whereby when the foldable member is in lowered position the foldable bars constitute side arms for a seat, and the tray supporting links occupy a substantially vertical position, substantially as described.

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