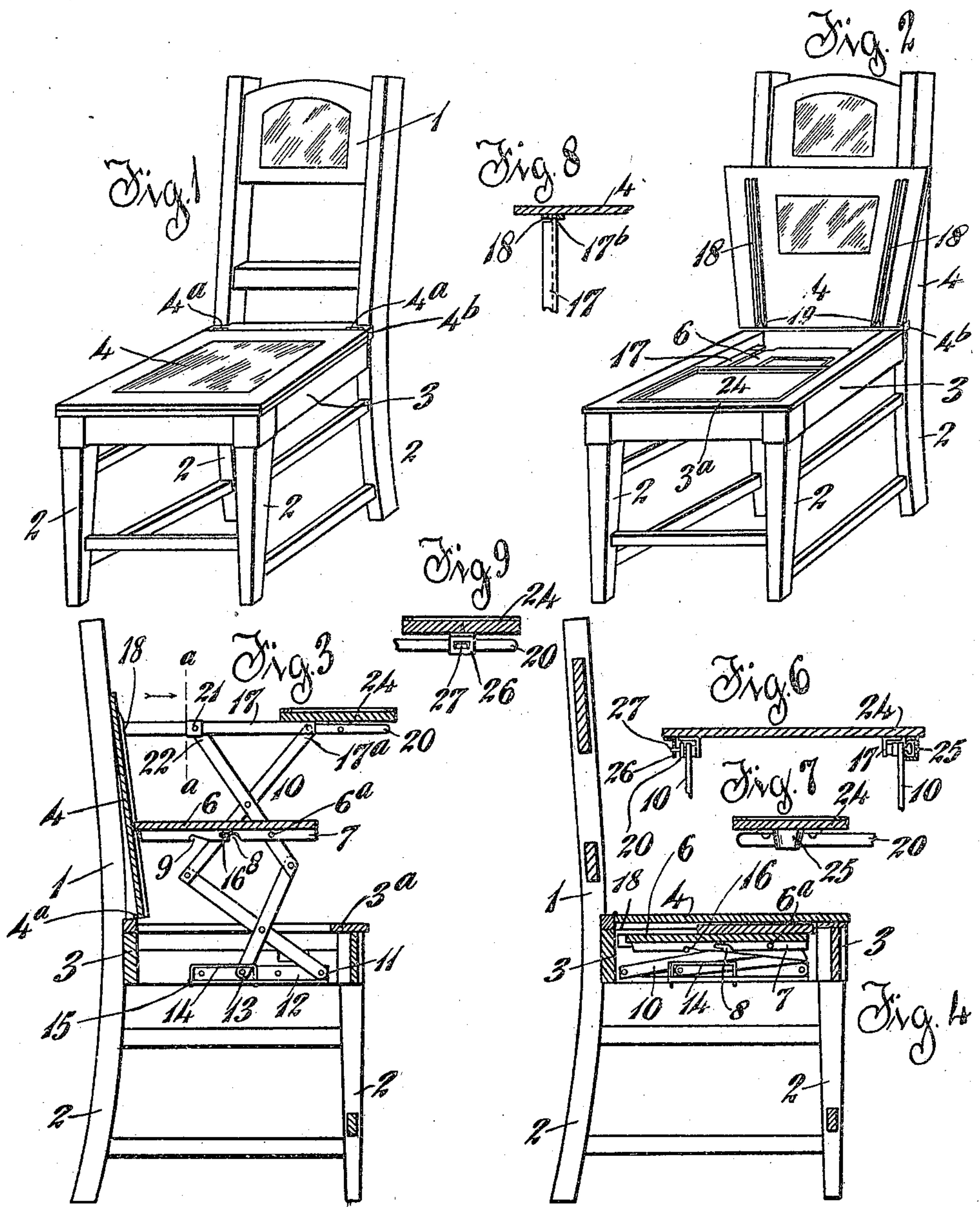


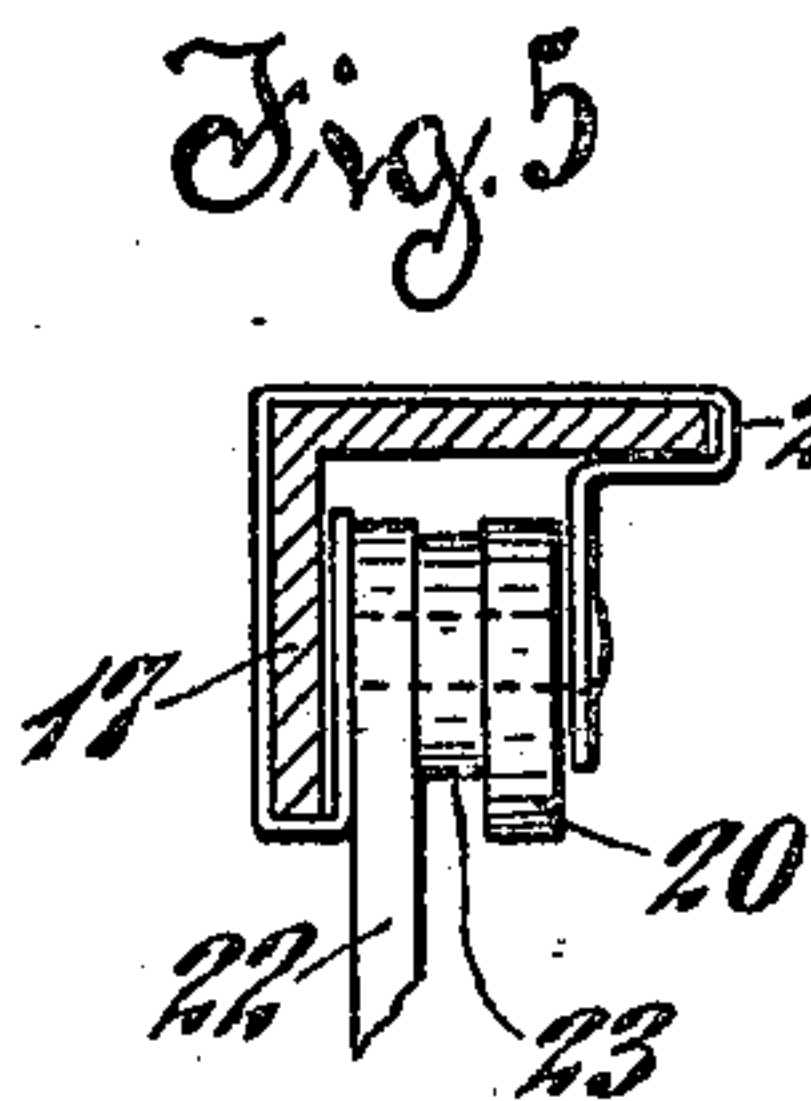
C. F. MILLER.
 CONVERTIBLE CHAIR.
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Witnesses
 Oliver J. Harman
 Norma Kuser.



Inventor
 Charles F. Miller,
 by John Elias Jones,
 his attorney.

UNITED STATES PATENT OFFICE.

CHARLES F. MILLER, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-FOURTH TO PHILLIP WEIS AND ONE-FOURTH TO CHRISTIAN WEIS, BOTH OF CINCINNATI, OHIO.

CONVERTIBLE CHAIR.

953,483.

Specification of Letters Patent. Patented Mar. 29, 1910.

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To all whom it may concern:

Be it known that I, CHARLES F. MILLER, a citizen of the United States of America, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in Convertible Chairs, of which the following is a specification.

This invention relates to improvements in convertible-chairs and the object thereof is to readily transform an ordinary adult's low dining-room or like chair into a child's high-chair.

The important features connected with the details of my invention herein will be fully hereinafter described and particularly pointed out in the claims.

In the accompanying sheet of drawings, Figure 1 is a perspective view of the convertible-chair comprising my invention herein and shows such chair in its normal position as it appears in ordinary use as a dining-room or like low chair; Fig. 2, a view similar to Fig. 1, but with the ordinary chair-seat raised on its hinges and with the parts comprising the high-chair structure ready for raising into place for use; Fig. 3, a central, sectional elevation of the chair, taken longitudinally thereof and showing the high-chair structure raised into position for use; Fig. 4, a view similar to Fig. 3, but with the said child's high-chair structure folded down within the chair-frame beneath the ordinary chair-seat, which latter is in normal position for ordinary dining-room or similar use; Fig. 5, a fragmentary, transverse section, (on a somewhat larger scale,) taken on the dotted-line *a, a*, of Fig. 3, showing one of the handle-bars or arm-rests, together with the encompassing slide-connection for the inner end of the accompanying tray supporting-arm; Fig. 6, a transverse section of a detail portion of the child's high-chair structure, showing the tray and its pivotal supporting-connections with the lazy-tongs; Fig. 7, a cross-section of one end of the said tray seen in Fig. 6, showing the manner in which it is pivotally-connected with the adjacent fore end of the horizontal supporting-arm; Fig. 8, a detail, fragmentary section of the chair-seat showing one of the guides on the bottom-side thereof and the inner end of one of the handle-bars or arm-rests of the child's high-chair engaged with said guide-way; and Fig. 9, a frag-

mentary, detail elevation showing the slotted-latch construction at one end of the high-seat tray.

In these views, 1 indicates the chair-back; 2, each one of the four legs of the chair; 3, the open rectangular frame supported by said legs in the usual manner; and 4, the ordinary adult's low chair-seat, but, in this particular, a movable one hinged at 4^a along its rear edge to a cross-bar 4^b on the chair-frame. The said ordinary low chair-seat is pivoted so as to hinge upward into the position shown in Fig. 2 and thereby render access to the open chair-frame, in which latter the child's high-chair structure is folded when out of use and raised upward therefrom when in use. The said child's high-chair structure I will now proceed to describe in detail.

6 indicates the child's seat, which is of reduced dimensions sufficient to freely move to and from the opening in the chair-frame. This seat has side flanges 7 along its opposite edges, projecting downwardly, as best seen in Fig. 3 and provided with notches 8 and 9.

10, 10 together indicate a pair of spaced lazy-tongs devices, a set being arranged at either end of said child's high-seat 6, the set seen in Fig. 3 being a counterpart of the set at the other end (not shown) of such child's seat to correspond and coact therewith. Each set of lazy-tongs is pivotally-connected at one end 11 with a metal bar 12 attached to and within the side-bar of the seat-frame, and a transverse bar or rod 13 connects the other lower end of the several lazy-tongs devices across the chair-frame. Detent-loops 14 are provided on the horizontal flanges 15 of the plates 12, under which detent-loops the transverse rod 13 moves to and fro in sliding-contact in the expansive-movements of the lazy-tongs devices, for the purpose hereinafter more particularly referred to.

6^a indicates a transverse rod on which the child's high-seat 6 is pivotally-supported on the lazy-tongs 10, 10.

A transverse rod or bar 16 is supported by the middle portion of the pair of lazy-tongs and is engaged by the notches 8 in the flanges 7 of the child's high-seat, as best seen in Fig. 3, to support said seat in a firm manner when extended upward into elevated place for use. Said rod 16 rests or seats out

of the way in the notches 9 when the child's high-seat has been lowered into closed position, as best seen in Fig. 4.

17 indicates a horizontal handle-bar or arm-rest, of right-angle cross-section, and pivotally-connected at its outer end to the outer upper end 17^a of each one of the pair of lazy-tongs and provided with an extension 17^b at its rear end to engage a guide-way 18 on the bottom of the low chair-seat 4 when the latter is in raised position and resting against the chair-back. The engagement of each handle-bar or arm-rest with its guide-way on the bottom of the chair-seat 4 is best seen in Fig. 8, but the guide-ways themselves are best seen in Fig. 2, the lower or inner ends of such guide-ways being flared or mouthed at 19 to provide for easy access of the projections 17^b into engagement therewith when the high-seat structure is raised from its closed position within the chair-frame.

20 indicates an extension-arm or bar slidably-connected with each handle-bar 17 by means of the encompassing strap or loop 21, the latter being suitably attached to the inner, upper end 22 of each set of lazy-tongs, as best seen in Figs. 3 and 5 and with a spacing-washer 23 intervening the said end 22 and the extension-arm 20.

24 indicates a horizontal tray supported in that position at all times at the outer ends of the extension-arms 20, a ball-hinge 25 being preferably provided at one end of the tray to enable it to be swung over into vertical position when desired, and a slotted angular plate 26 being provided at the opposite end of the tray for engagement with a latch-projection 27 that extends laterally from the adjacent arm 20, as best seen in Fig. 6. The said latch devices 26 and 27 provide means of readily locking and unlocking the free end of the tray 24, the locking thereof being desirable for the child occupying the high-seat, for the customary precautionary reasons.

When it is desired to raise the folded or closed high-seat structure from the ordinary adult's low chair, the lid or seat 4 is raised on its hinges so as to rest against the back 1 and then the rear middle edge of the tray 24 is grasped by the hand and drawn upward, thereby carrying the lazy-tongs into expanded condition and such expansion causing the high-seat 6 to raise, the inner ends of the handle-bars or arm-rests 17 to travel along their guide-ways 18, the extension-arms 20 to project forward and carry the tray 24 forward, the rod 13 to travel along the detent-loop 14 forwardly and finally to permit the rod 16 to engage the notches 8 in the said flanges 7. The engagement of the rod 16 in the notches 8 serves to firmly support the seat 6 in its upward position for the child to use it and the tray 24 is extended

forwardly sufficient for the child to be placed on said seat 6, with its feet resting on the forward cross-bar 3^a of the chair-frame 3. When the high-seat is to be lowered into closed-position within the ordinary low chair-seat, the tray 24 is again taken hold of and the handle-bars 17 drawn slightly upward sufficient to cause the lazy-tongs to expand and cause the disengagement of the rod 16 from the notches 8, at which time the seat 6 may be tilted slightly upward at its rear end and then permitted to rest on the rod 16 in a horizontal position until the lazy-tongs are closed within the seat-frame 3, as best seen in Fig. 4, said rod 16 engaging the notches 9 when the high-seat structure is closed, as hereinbefore stated.

The detent-loops 14, when the high-seat structure is in expanded or upward position, prevent the further upward movement of the lazy-tongs devices, owing to the engagement of the rod 13 with such detent-loops. Accidental disengagement of the parts when in extended position is also prevented by said engagement of rod 13 with the detent-loops 14.

I claim:

1. A convertible-chair comprising an ordinary low chair having a hinged seat, guide-ways on the bottom of said seat, a pair of suitably spaced lazy-tongs or lever mechanism mounted in the seat-frame, a child's high-seat pivotally-supported on said lazy-tongs or lever mechanism and handle-bars or arm-rests supported by said lazy-tongs in relation to said child's high-seat and engaging the guide-ways on the bottom of the chair-seat when the latter is in raised position.

2. A convertible-chair comprising an ordinary low chair having an open seat-frame, a hinged lid or seat mounted on said seat-frame and adapted to fold upward and backward against the chair-back, a pair of suitably spaced lazy-tongs pivotally-connected at their lower ends to said seat-frame, detent-loops engaging the lower portion of each set of lazy-tongs to limit the upward expansive movement thereof, a child's high-seat of lesser area than the opening within said seat-frame and pivotally-supported by said pair of lazy-tongs, flanges on the child's high-seat provided with notches, a transverse rod on the pair of lazy-tongs engaging said notches in the child's high-seat flanges, handle-bars or arm-rests mounted on the upper ends of the pair of lazy-tongs, sliding extension-arms mounted on said arm-rests, a tray supported by said sliding extension-arms and means for pivotally-holding and detachably-locking said tray in position.

3. A convertible-chair comprising an ordinary chair having an upright back, an open rectangular-frame extending forwardly from said back, four supporting-legs, a seat pivot-

ally-connected or hinged at its rear edge to
the chair-back, an auxiliary child's high-seat
of reduced size within said open rectangular
chair-frame, a lazy-tongs at either side said
5 child's high-seat pivotally-connected thereto
and, also, pivotally-connected at one of its
lower ends to the seat-frame, a handle-bar
or arm-rest pivotally-connected at one of the
upper ends of said lazy-tongs at either side
10 the child's high-seat, a sliding extension-arm
pivotally connected to the other end of said
lazy-tongs at either side the child's high-seat,
a tray supported by said sliding extension-

arms at the fore ends thereof, guide-ways on
the bottom of said hinged chair-seat and 15
adapted, when the latter is raised, to receive
projections at the inner ends of said handle-
bars, and detent-loops within the open chair-
frame adapted to engage the lower ends of
the lazy-tongs to limit the upward movement 20
of said lazy-tongs when the child's high-seat
is in elevated position for use.

CHARLES F. MILLER.

Witnesses:

JOHN ELIAS JONES,
NORMA KEISER.