Jan. 31, 1950 M. GLENN 2,495,843

CHILDREN'S HIGH CHAIR DEVICE

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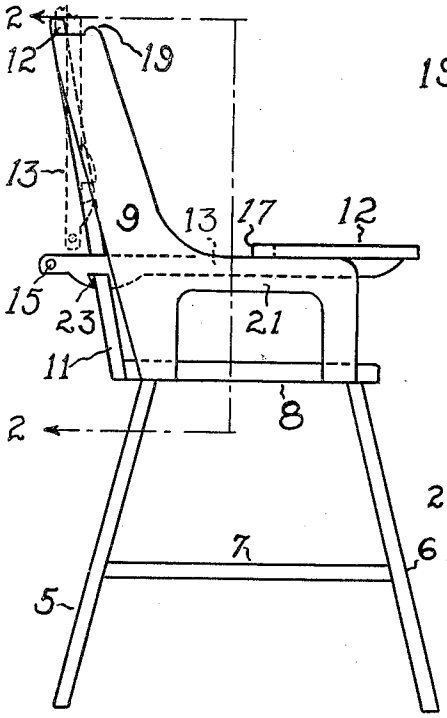


Fig. 1.

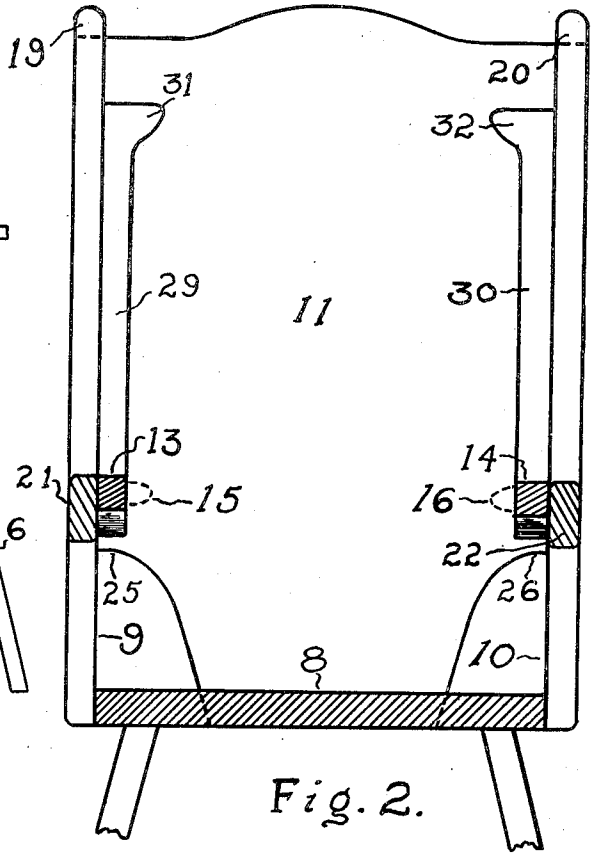


Fig. 2.

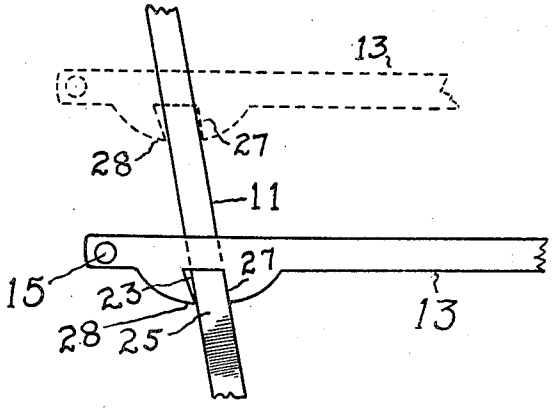


Fig. 3.

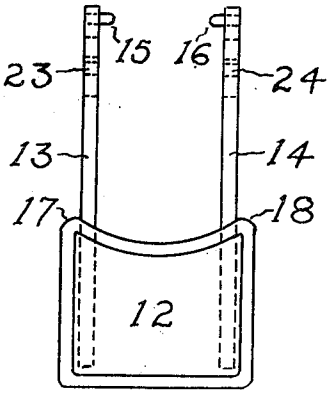


Fig. 4.

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CHILDREN'S HIGH CHAIR DEVICE

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2 Claims. (Cl. 155—127)

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My invention relates to improvements in children's high chairs, and the objects of my improvements are, first to provide a high chair tray which is easily and readily detachable from the high chair; second to provide a high chair tray which is easily placed in a fixed position close to the child; and, third, to provide a feature in a high chair to hold the tray in a handy out-of-the-way position when not in use.

I attain these objects by mechanism illustrated in the accompanying drawing in which:

Figure 1 is a full view of my invention in combination with a child's high chair.

Figure 2 is an enlarged fragmentary section taken through 2—2 of Fig. 1 showing back of high chair and the operation of my improvement therewith.

Figure 3 is an enlarged detail view of novel locking features which prevents child from lifting the high chair tray and which keeps the tray close to the child when in use.

Figure 4 is a plan view of my novel tray when it has been detached from the high chair.

Before taking up a more detailed description of the drawing, a general exposition of the specific purposes, functions and advantages of the improved features of children's high chairs involved by the present invention will be undertaken.

Heretofore one type of high chairs has been equipped with trays which were fastened to two pivotal arms and were swung in a contracted arc over the child's head and were finally brought to a non-use position in back of the high chair. This operation is annoying to the child. Further, in the old type high chair, when the tray is put in a non-use position, the tray swinging in an arc up and in back of the high chair requires considerable clearance in back of the high chair making it difficult to use in a small space.

Another type of high chair in use at the present time has a removable tray fastened to the high chair on the side arms with various types of mechanical fasteners. The objection to this type is that unless the fasteners are well and expensively made they break through use or don't work properly and the child is likely to push the tray off and fall from the high chair. Also, such type of tray must be laid down on some other object when the tray is removed to take the child from the high chair.

The objections to the above types of trays are not present in my invention. The advantages of my tray are: (1) The tray assembly can be raised vertically until the holding notches disengage from the back of the high chair, the assembly then moved forward and raised vertically up above the child. (2) The tray when not in use can be put in a non-use position out of the way and ready to be brought into the use position when the child is again put into the high chair. (3) The high chair tray can be pushed snugly against the child and held there by the notches in the tray arms falling into position, and, (4) the high chair tray embodied in my invention can be removed easily for washing.

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Beginning now the more detailed description of the invention by reference to the accompanying drawing, Figure 1 embodies a high chair consisting of legs 5 and 6 and two other legs not seen in the drawing, leg brace 7, seat 8, sides 9 and 10 (side 10 shown in Figure 2), back 11, tray 12 and tray arms 13 and 14 (tray arm 14 shown in Figure 2), and stop pegs 15 and 16 (stop peg 16 shown in Figure 2). These various parts are fabricated together in any well known manner by screws, glue and/or nails which detail has not been shown in order to simplify the drawing. The tray assembly 12—13—14 is brought from a non-use position as shown by broken lines in Figure 1 by lifting the assembly slightly up so that the tray corners 17 and 18 (see Figure 4) clear the nobs 19 and 20 fashioned on the back of the high chair. The tray assembly 12—13—14 is then moved to a horizontal position and brought down over the child's head and body to an in-use position resting on arms 21 and 22 of sides 9 and 10. If the child is eating, the tray can be pushed back close against the child so that notches 23 and 24 of the tray arms 13 and 14, respectively, engage the extended portions 25 and 26 of back 11.

Notches 23 and 24 fashioned in tray arms 13 and 14 as shown in enlarged detail of arm 13 in Figure 3 are so designed that any upward lift of the tray 12, when notches 23 and 24 engage extensions 25 and 26 of back 11, causes surface 27 and point 28 of notch 23 (and, corresponding parts of arm 14) as disclosed in Figure 3 to bind so that tray assembly 12—13—14 cannot be raised, unless lifted from the rear of the high chair. Notch 23 has a gripping effect similar to the well known function of a wrench. When an upward pressure is put on arms 13 and 14 at some point behind chair back 11 pressure on surface 27 and point 28 are relieved so that the tray assembly 12—13—14 is easily raised and notches 23 and 24 disengage. This action is illustrated by broken line view of arm 13 as shown in Figure 3.

When it is desirable to remove tray assembly 12—13—14 from the high chair, the assembly is lifted upwardly holding the assembly in a horizontal plane. When tray arms 13 and 14 reach the top of apertures 29 and 30 cut in back 11, the pins 15 and 16 slip easily through enlarged apertures 31 and 32 when the tray assembly 12—13—14 is pulled forward. The tray assembly 12—13—14 is reattached to the high chair by reversing the process described.

While I have herein shown and described the invention with sufficient detail to enable those skilled in the art to which it pertains to understand the mode of construction and the principles involved, it is to be understood that there is no intentional limitation herein to the specific form and precise details of construction shown and described, except as expressly defined by the appended claims, and that various modifications of the same may be resorted to without departing from the spirit of the invention or the benefits derivable therefrom. It is also to be understood that certain features of the invention herein disclosed may be employed with other combinations than those shown and described. It will be noted that I have shown only one notch in each tray arm. However, a multiple of notches may be employed in each arm for different positions. Likewise other variations may be employed within the scope of my invention.

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

1. A tray attachment for a chair, said chair having a seat, opposite arms carried by opposite sides of the seat, the rear ends of said arms terminating in upwardly extending members, a back between said upwardly extending members, opposite sides of said back having vertical cutaway portions thereby forming vertically elongated tray arm receiving passages between the upwardly extending members and opposite sides of the back, said tray being wider than the distance between the chair arms, rearwardly extending arms carried by the tray to the inside of the chair arms and extending through the vertically elongated opening formed by the chair back, the rear ends of said tray arms having notches in their under faces, said notches cooperating with shoulders in the back formed by the vertically elongated openings stop pins carried by the rear ends of the tray arms and overlying the rear side of the back, the upper ends of the vertical passages in the back terminating in inwardly extending recesses through which the tray arms and pins will pass into and out of engagement with the chair back.

2. A device as set forth in claim 1 wherein the chair back inclines upwardly and rearwardly, said side members of the chair forming the upwardly extending projection of the chair sides having their upper ends recessed and positioned to receive opposite sides of the tray when the tray is vertically positioned with its arms inclining downwardly.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
575,288	Trimble	Jan. 12, 1897
859,557	Hencke	July 9, 1907
1,266,471	Howard	May 14, 1918
1,471,007	Schmidt	Oct. 16, 1923
1,875,295	Fox	Aug. 30, 1932