

June 11, 1935.

E. L. BOLSTER

2,004,648

SECURING DEVICE FOR CONVERTIBLE HIGH CHAIRS

Filed April 12, 1934

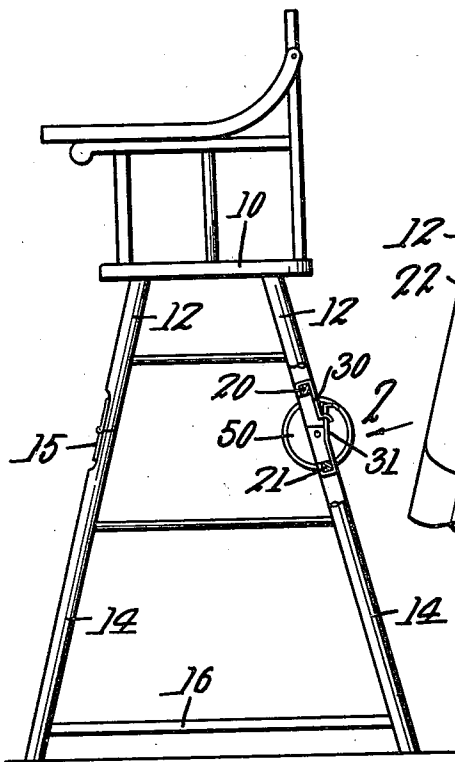


Fig. 1.

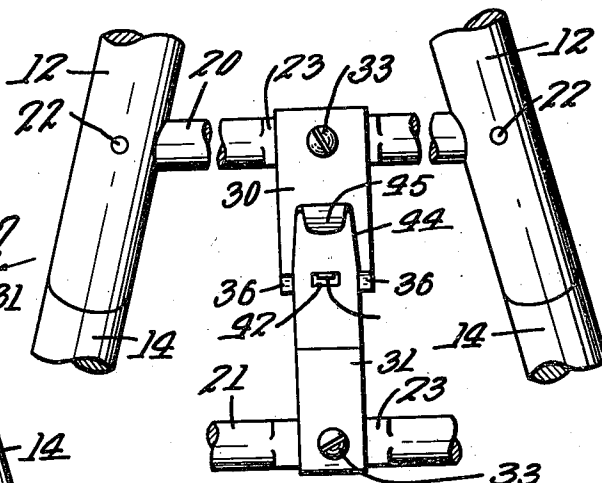


Fig. 2.

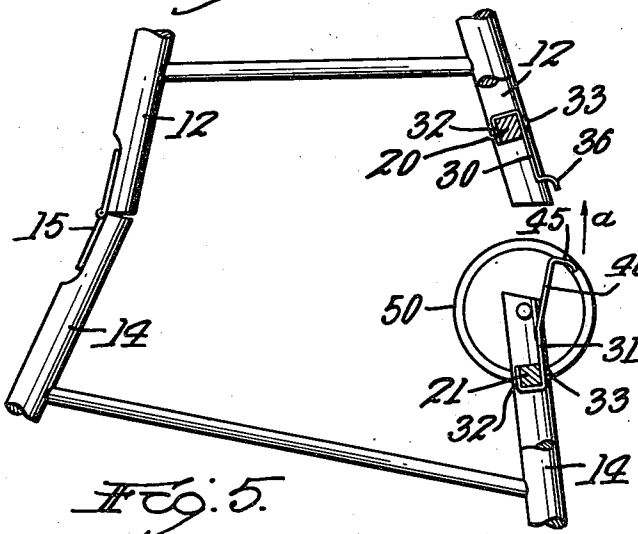


Fig. 5.

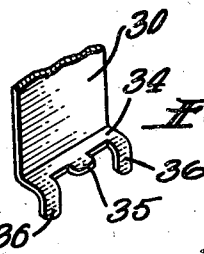


Fig. 3.

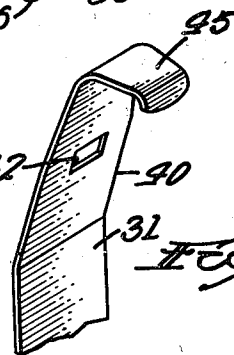


Fig. 4.

Inventor
Ernest L. Bolster
By Attorneys
Smithgate & Foy & Hawley

UNITED STATES PATENT OFFICE

2,004,648

SECURING DEVICE FOR CONVERTIBLE
HIGH CHAIRSErnest L. Bolster, Gardner, Mass., assignor to
Chair Town Manufacturing Co., Gardner,
Mass., a corporation of Massachusetts

Application April 12, 1934, Serial No. 720,264

5 Claims. (Cl. 155—38)

This invention relates to a convertible high chair and particularly to a device for securing certain relatively movable parts of the chair in operative relation.

5 It is the general object of my invention to provide an improved securing device for such purposes, so designed that it may be easily and economically manufactured and that the parts of the chair secured thereby will be firmly held in the desired operative relation.

10 A further object of the invention is to provide a construction by which the parts will automatically seat and lock together when placed in operative relation.

15 My invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly pointed out in the appended claims.

20 A preferred form of the invention is shown in the drawing, in which

Fig. 1 is a side elevation, partly in section, of a convertible high chair embodying my improvements;

25 Fig. 2 is an enlarged detail view, looking in the direction of the arrow 2 in Fig. 1;

Figs. 3 and 4 are partial perspective views of the two members constituting the securing device, and

30 Fig. 5 is an enlarged side elevation of certain parts and illustrating the operation of the securing device.

Referring to the drawing, I have shown a high chair of a commercial type comprising a seat 10 mounted on a frame having an upper portion 12 and a lower portion 14. The frame portions 12 and 14 are connected at one side by hinges 15 which permit the lower portion 14 to be inverted when it is desired to use the chair in its lowered position. The bottom member 16 of the lower portion 14 is preferably made in the form of a tray which comes into position for use when the portion 14 is inverted.

40 My present invention relates particularly to devices for securing the portions 12 and 14 in the operative relation indicated in Fig. 1. For this purpose I provide cross rounds 20 and 21 in the rear side of the frame portions 12 and 14 and opposite to the hinges 15. These rounds are firmly secured from turning in the frame portions 12 and 14, as by pins or dowels 22 (Fig. 2), and are preferably provided with square or non-circular intermediate portions 23 to which the parts of the securing device may be attached.

45 The securing device comprises an upper latch member 30 and a lower latch member 31. The members 30 and 31 are preferably formed of sheet

steel or other slightly resilient material, and are each preferably provided with reversely bent end portions 32 snugly fitting the rectangular intermediate portions 23 and secured thereto by screws 33 or other suitable attaching means.

5 The latch member 30 at its lower end is preferably formed as indicated in Fig. 3, being provided with an offset flange or ledge 34 having a tongue 35 and down-turned guide elements 36.

10 The lower latch member 31 has its upper portion bent outwardly as indicated at 40 and is of such width as to enter easily between the guide members 36. The portion 40 is provided with a slot 42 to receive the tongue 35, and the upper end of the portion 40 is reduced in width as indicated at 44 (Fig. 2) for easy entrance between the guide elements 36. The portion 40 also has a portion 45 outwardly turned to form a convenient hand piece by which the latch members may be disengaged.

20 Wheels 50 are preferably mounted on the rear legs of the lower frame portion 14, said wheels 50 engaging the floor when the portion 14 is inverted and preventing such engagement of the lower latch member 31.

25 Having described the construction of my improved securing device for a convertible high chair, the operation and advantages thereof will be readily apparent. As the parts are moved toward operative relation, indicated by the arrow α in Fig. 5, the portion 40 of the lower latch member 31 enters between the guide elements 36 and is yieldingly pushed outward until the tongue 35 is aligned with the slot 42, at which time the parts snap into the locking relation indicated in Figs. 1 and 2 and are securely held from displacement until manually separated.

30 My improved securing device is not only simple in construction but is particularly reliable in use, and accidental displacement or separation of the parts is effectively prevented.

35 Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:—

40 1. A convertible high chair having upper and lower frame parts hinged together at one side, each frame part having a cross round at the opposite side and each frame part having portions projecting beyond its respective cross round and abutting corresponding portions of said other frame part, whereby said rounds are spaced vertically when the frame parts are assembled in operative relation, a pair of latch members mounted on said cross rounds and projecting

toward each other for engagement in the space between said cross rounds to collectively form a securing device, one of said latch members having a tongue and the other having a slot receiving said tongue as one of said frame parts is swung to operative position relative to the other frame part, thereby securely locking said frame parts together, and means on the projecting portions of one of said frame parts overlapping the projecting portions of the other frame part, said latch members lying within and being engaged within the confines of said overlap.

2. A convertible high chair having upper and lower frame parts hinged together at one side, each frame part having a cross round at the opposite side and each frame part having portions projecting beyond its respective cross round and abutting corresponding portions of said other frame part, whereby said rounds are spaced vertically when the frame parts are assembled in operative relation, a pair of latch members mounted on said cross rounds and projecting toward each other for engagement in the space between said cross rounds to collectively form a securing device, one of said latch members having a tongue and the other having a slot receiving said tongue as one of said frame parts is swung to operative position relative to the other frame part and thereby securely locking said frame parts together, one of said latch members having guiding elements engaging side edges of the other latch member to align said latch members and said frame parts, and means on the projecting portions of one of said frame parts overlapping the projecting portions of the other frame part, said latch members lying within and being engaged within the confines of said overlap.

3. A convertible high chair having upper and lower frame parts hinged together at one side, each frame part having a cross round at the opposite side and each frame part having portions projecting beyond its respective cross round and abutting corresponding portions of said other frame part, whereby said rounds are spaced vertically when the frame parts are assembled in operative relation, a pair of slightly resilient sheet metal latch members mounted on said cross rounds and projecting toward each other for engagement in the space between said cross rounds to collectively form a securing device, one of said latch members having a tongue and the other having a slot to receive said tongue, and said tongue entering said slot as said frame parts reach assembled operative position and securely

locking said frame parts together, and means on the projecting portions of one of said frame parts overlapping the projecting portions of said other frame part, said latch members lying within and being engaged within the confines of said overlap.

4. A convertible high chair having upper and lower frame parts hinged together at one side, each frame part having a cross round at the opposite side with a non-circular intermediate portion and each frame part having portions projecting beyond its respective cross round and abutting corresponding portions of said other frame part, whereby said rounds are spaced vertically when the frame parts are assembled in operative relation, a pair of slightly resilient sheet metal latch members mounted on and secured to said intermediate portions of said cross rounds and projecting toward each other for engagement in the space between said cross rounds to collectively form a securing device, one of said latch members having a tongue and the other having a slot in which said tongue enters as said frame parts reach assembled operative position, thereby securely locking said frame parts together, and means on the projecting portions of one of said frame parts overlapping the projecting portions of the other frame part, said latch members lying within and being engaged within the confines of said overlap.

5. A convertible high chair having upper and lower frame parts hinged together at one side, each frame part having a frame member at the opposite side and having portions projecting beyond said frame member and abutting corresponding portions of said other frame part, whereby said frame members are spaced vertically when the frame parts are assembled in operative relation, and a pair of latch members mounted respectively on said upper and lower frame members and projecting toward each other for engagement in the space between said frame members to collectively form a securing device, one of said latch members having a tongue and the other having a slot receiving said tongue as one of said frame parts is swung to operative position relative to the other frame part, thereby securely locking said frame parts together, and means on the projecting portions of one of said frame parts overlapping the projecting portions on the other frame part, said latch members lying within and being engaged within the confines of said overlap.

ERNEST L. BOLSTER.