

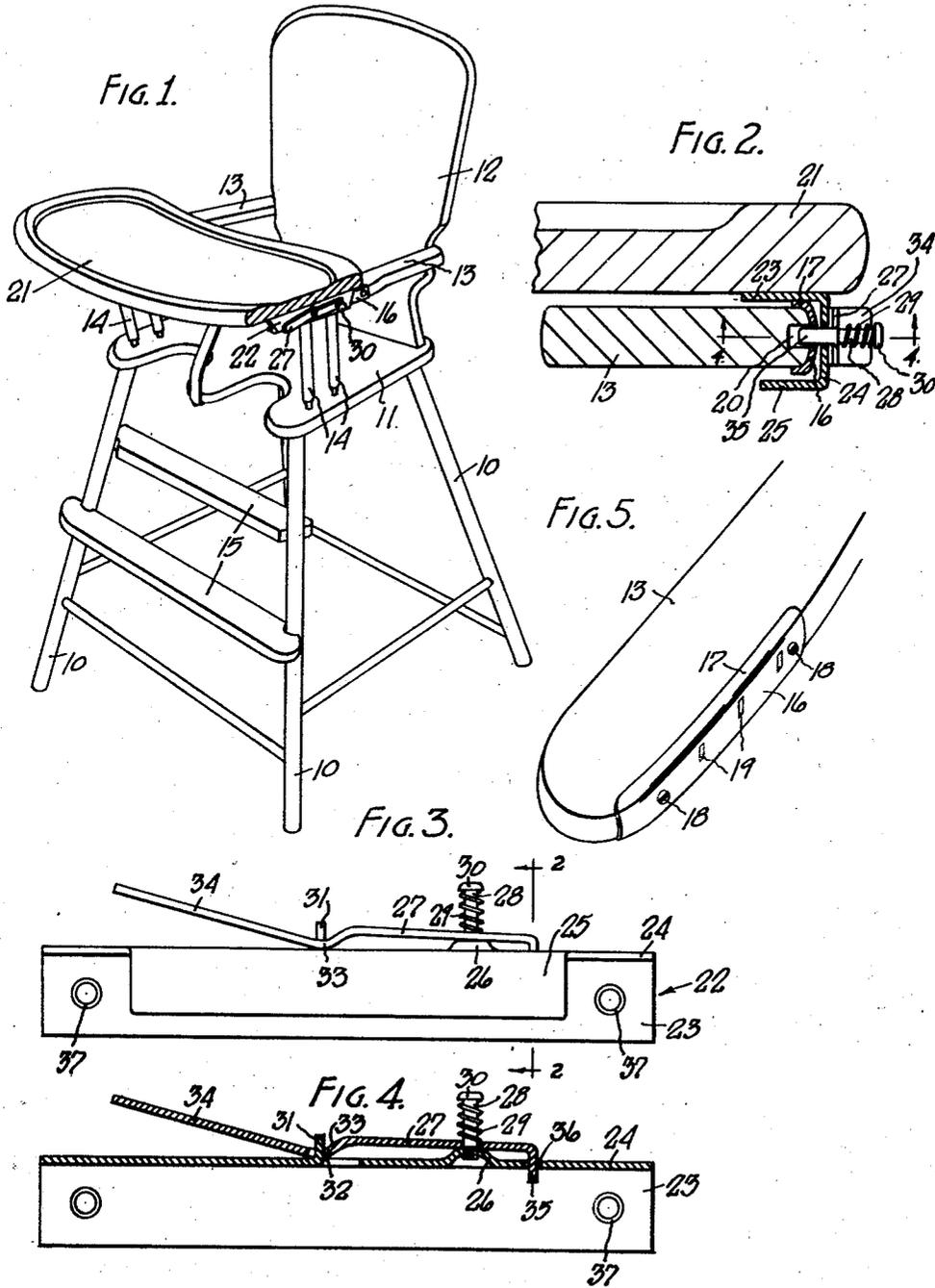
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SLIDING TRAY FOR HIGH CHAIRS

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## SLIDING TRAY FOR HIGH CHAIRS

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7 Claims. (Cl. 155—127)

This invention relates to a sliding tray for a high chair, and more particularly to a tray for a child's high chair.

The primary object of the invention is to provide a sliding tray construction which is novel, simple, and inexpensive.

A further object is to provide a device of this character wherein the sliding of the tray is guided by metal parts and the tray is locked by the interengagement of metal parts.

A further object is to provide a chair having an arm rest with an apertured metal sheath, a tray with a guide channel slidable on said sheath, and a spring pressed lock on the channel adapted to fit in the sheath apertures.

Other objects will be apparent from the description, drawing, and appended claims.

In the drawing:

Fig. 1 is a perspective view of a high chair provided with my improved sliding tray.

Fig. 2 is an enlarged fragmentary detail sectional view, taken on line 2—2 of Fig. 3, and illustrating the manner in which the tray is locked in selected position on the arm rest.

Fig. 3 is a bottom plan view of the side channel carried by the tray.

Fig. 4 is a longitudinal sectional view of the guide channel on the tray, taken on line 4—4 of Fig. 2.

Fig. 5 is a fragmentary perspective view illustrating the arm rest and the metal sheath mounted thereon.

Referring to the drawing, the numeral 10 designates the legs of a high chair. A seat 11 is mounted upon the said legs, and a chair back 12 is mounted upon the rear of the seat 11. Arm rests 13 project from the opposite sides of the chair back 12 and are supported at their forward ends by bars 14. Suitable foot rests 15 are mounted on the front legs of the chair.

Each of the arm rests 13 has a metal sheath 16 applied to the outer edge thereof, as best illustrated in Fig. 5. The sheath 16 is preferably formed from sheet metal shaped to conform to the contour of the outer edge of the front end of the arm rest, and includes a portion 17 overlying the top surface of the arm rest. The arm rest is preferably curved at its forward end, and sheath 16 extends partially around said curve. Sheath 16 is secured to the arm rest at 18. The sheath 16 is provided with a plurality of longitudinally spaced narrow vertical apertures 19 which communicate with apertures 20 in the edge of the arm rest.

A conventional tray 21 is adapted to be mount-

ed upon the arm rests to span the forward ends thereof. This tray may be of any desired size and shape. Elongated guide channels 22 extending in parallel relation are mounted on the bottom face of tray 21 adjacent opposite sides thereof. Channels 22 comprise securing flange 23, a vertical web portion 24, and a lower flange 25. The webs 24 of opposed channels 22 are preferably spaced apart a distance slightly greater than the spacing of the outer surfaces of the sheaths 16 on the arm rests. Adjacent one end thereof the channel portion 24 is offset at 26. The offset 26 serves as a spacer for one end of a latching member 27. A pin 28 is threaded in offset 26 and extends loosely through an aperture in latching member 27. A coil spring 29 encircles pin 28 and bears at its opposite ends upon the latch member 27 and on the head 30 of pin 28. Intermediate its ends and spaced from the offset 26, the wall 24 of channel 22 has struck therefrom an ear 31. This ear fits in an opening 32 in the latch member 27 at an inwardly offset fulcrum portion 33 of said latching member. The handle portion 34 of the latching member 27 on one side of fulcrum offset 33 extends at an angle to the remainder of the latching member and normally at an angle to the wall 24 of the channel 22. The end of the latching member 27 adjacent the pin 28 is provided with an inturned locking portion 35 which passes through an opening 36 in wall 24 and projects inwardly beyond the inner face of said channel wall 24. Wall 23 is preferably secured to the tray by means of screws passing through the apertures 37 in the ends thereof.

The parts cooperate and fit together, as best illustrated in Fig. 2. It will be observed from this figure that the flange 23 of the channel 22 bears upon the portion 17 of sheath 16 on the arm rest, so that the sliding of the parts one relative to the other is facilitated by a metal to metal contact. In this way the finish of the wood parts of the device, namely, the arm rests, and the tray is safe-guarded, and marring or scratching thereof is avoided.

Sufficient clearance is provided between the vertical walls 24 of the guide channels and the sheath 16 to facilitate sliding of the tray upon the arm rest and to prevent binding of the parts.

The latching member 27 is held in place by a loose two point supporting engagement with said channel 22, coupled with the pressure of spring 29 applied at the latching end thereof. The locking projection 35 on the latching member 27 is of a size to fit freely in the apertures 20

in the arm rest. In the preferred construction, the openings 20 in the arm rest will be at least as large as the apertures 19, and preferably slightly larger, so that a metal to metal locking engagement is provided.

It will be understood that, for preferred operating characteristics, the screws 18 securing the sheath 16 to the arm rests, and the screws passing through the openings 37 in the walls 23 in the guide channels will be countersunk to lie substantially flush with the sheath 16 and channel wall 23, respectively.

I claim:

1. The combination with a chair having arm rests and a tray spanning said arm rests, of an apertured metal bearing plate conforming and secured to an edge of each arm and including a portion overlying the top of the arm, a pair of parallel channels secured to the opposite sides of said tray at the bottom thereof, said channels fitting slidably around said bearing plates to space the bottom of the tray above the tops of the arm rests, and means carried by said channels and fitting in the apertures in said bearing plates to lock said tray in selected position relative to said arms.

2. The combination with a chair having arm rests and a tray spanning said arm rests, of a metal sheath fitting snugly on and secured to an edge of each arm and overlying a part of the top of each arm, said sheath having a plurality of longitudinally spaced apertures, parallel channels carried by opposite ends of the underside of said tray and fitting slidably around said sheaths to space the bottom of the tray above the tops of the arm rests, and releasable locking means carried by said channels and having a part adapted to seat in said apertures.

3. The combination with a chair having arm rests and a tray spanning said arm rests, of an apertured metal sheath fitting around one edge and overlying a part of the top of each arm rest, a pair of elongated metal guide members of C-section carried by said tray and fitting slidably around said sheaths to space the bottom of the tray above the tops of the arm rests, each guide member having an aperture adapted to register with one of the apertures of the adjacent sheath, and a spring pressed locking member projecting through said guide aperture and adapted to seat in a sheath aperture.

4. The combination with a chair having arm

rests terminating in curved forward ends, and a tray spanning said arm rests and carrying metal guide channels adapted to fit slidably around one edge of each arm rest, of a metal sheath secured to the edge of each arm rest around which the adjacent channel fits to space the bottom of the tray above the arm rests, said sheath including a portion overlying the top surface of said arm rest and having a front portion curved in conformity with and extending partially around the curved end of said arm rest.

5. The combination defined in claim 4, wherein said sheaths have a plurality of longitudinally spaced locking apertures and said arm rests have recesses communicating with said apertures and a locking member carried by each guide channel and adapted to seat in one set of communicating apertures and recesses.

6. The combination with a chair having apertured arm rests and a tray spanning said arm rests; of a pair of C-shaped metal guides carried by the bottom of said tray and adapted to fit slidably around an edge of each arm rest to space the tray above the arm rests; the vertical portion of each guide having a tongue struck outwardly therefrom, an opening spaced from said tongue, and an offset intermediate said tongue and opening; an elongated latch member having an opening fitting around said tongue, and a laterally projecting latching element projecting through said guide opening; said member having an off-set adjacent said tongue; and spring pressed means carried by said guide offset and urging said member against said offset.

7. The combination with a chair having arm rests and a tray spanning said arm rests, of a pair of elongated metal guide channels carried by the bottom of said tray and fitting slidably around an edge of each arm rest to space the tray above the arm rests, an elongated spring pressed latching member pivotally mounted on each channel in generally parallel relation thereto, said member being bent intermediate its ends and having a laterally projecting locking element, said guide having an opening receiving said locking element, and apertured metal sheaths fitting around and secured to the edges of said arm rests about which said channels fit and each including a portion overlying the top of said arm rest and engaged by the cooperating channel.

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