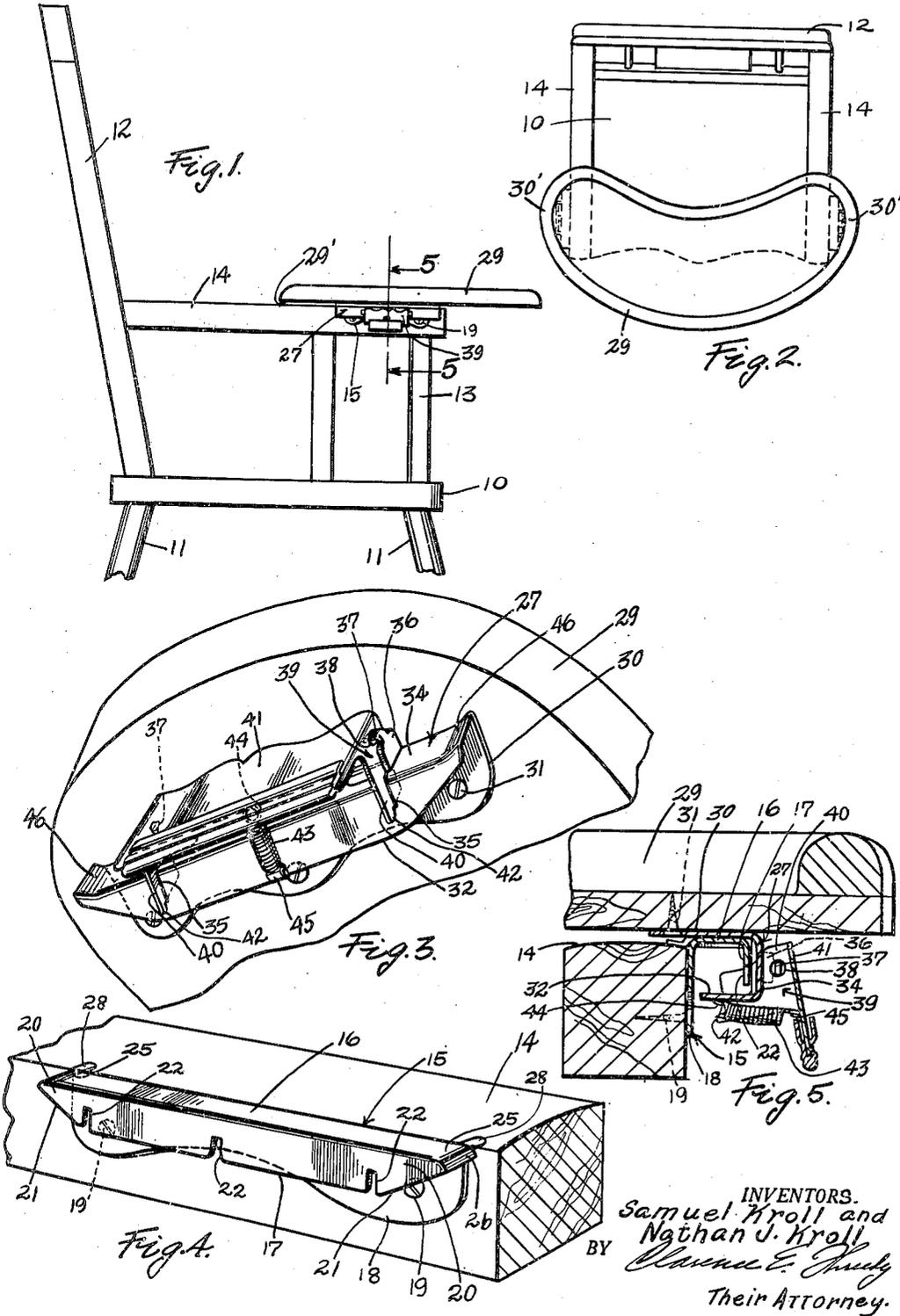


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ADJUSTABLE SLIDE DEVICE FOR ATTACHING THE  
TABLE OF A HIGH CHAIR TO THE ARMS THEREOF  
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## ADJUSTABLE SLIDE DEVICE FOR ATTACHING THE TABLE OF A HIGH CHAIR TO THE ARMS THEREOF

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3 Claims. (Cl. 155—127)

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This invention relates to adjustable slide devices. More particularly the invention relates to an adjustable latch for latching the table of a high chair to the opposite parallel arms thereof. The invention has as one of its principal objects the provision of an improved construction of this character which will be highly efficient in use and economical in manufacture.

It is not unusual for a baby or child in occupying a high chair with a table attached to the parallel arms thereof, to grasp the table and shake the same to create a noise. Our improved adjustable slide device, when associated with a high chair of the character hereinbefore described, utilizes a latching arrangement which performs the two-fold purpose of releasably latching the table in an adjusted position with respect to the opposite parallel arms of the high chair and also serves to yieldably resist the shaking of the table by the child relative to the chair arms whereby to discourage the baby or child in its playful shaking of the table.

Yet another and equally important object is the provision of an adjustable slide device having a latch provided with spaced teeth which engage the track of the device, thus latching the slide to the track at two different points.

Another and equally important object of the invention is an adjustable slide device of the character hereinafter described in which the latch structure is self-adjustable in spaced notches provided in a wall or flange of the track of the device. This enables the attendant to place the table in an adjusted position upon the opposite parallel arms of the high chair without the necessity of first adjusting the latch mechanism.

Another and equally important object of the invention is the provision of an adjustable slide device in which the latch mechanism is operable by application of pressure of the fingers of the hand thereon, thus enabling removal of the table with facility from an adjusted position upon the parallel arms of the high chair by merely compressing the hand.

Another object of the invention is the provision of an adjustable slide device of the character hereinafter described which comprises relatively few parts and in which the parts are so constructed and designed as permits the assembly to be used on either the right or left-hand side of the chair, thereby eliminating the necessity of having right-hand and left-hand assemblies.

Yet another and equally important object of

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the invention is the provision of means on the track for locating the top surface of the track in a proper position upon the arm of the high chair whereby the top surface of the track upon which the slide member moves, will be always elevated above the arm of the high chair, and which means will greatly facilitate locating the track upon the arm of the high chair without the use of complicated tools such as a jig or fixture or the like.

Other objects will appear hereinafter.

The invention consists in the novel combination and arrangement of parts to be hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings showing the preferred form of construction, and in which:

Fig. 1 is a fragmentary side elevational view of a conventional high chair showing our improved adjustable slide device associated therewith;

Fig. 2 is a top plan view of the same;

Fig. 3 is a fragmentary perspective view of the underside of the high chair table showing our improved slide device associated therewith;

Fig. 4 is a fragmentary perspective view of one of the arms of the high chair illustrated in Fig. 1, showing the track embodied in our invention associated therewith;

Fig. 5 is a fragmentary sectional detail view taken substantially on line 5—5 of Fig. 1.

A conventional high chair of a standard construction and one which is well-known in the art and in common use, includes a seat 10 supported by the usual legs 11. From this seat 10 extends a back 12 and on the opposite sides thereof and connected in a conventional manner to the seat 10 and the back 12 are arms 13 of the high chair, each including the parallel top rails 14.

It is with such a high chair that our approved adjustable slide device is associated.

In this connection, as shown in Fig. 4, our improved slide device comprises a track 15 formed substantially channel-shaped in cross section, providing a top 16 and spaced depending flanges 17 and 18. The flange 18 is secured to the arm 14 of the high chair by means of connecting screws 19 or the like. The flange 17 has its opposite end portions 20 tapered to provide cam edges 21 for reasons which will be hereinafter more fully explained. This flange 17 is provided with a plurality of spaced slots 22.

While we have shown three of these slots in Fig. 4, it is to be understood that any number of such slots may be employed.

The opposite end portions 25 of the top wall 16

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are beveled downwardly as at 26 so as to facilitate guiding the slide member 27 upon the track. This top wall 16 has extending therefrom lateral spaced tongues 28 which are disposed in a plane below the plane of the top surface of the wall 16 whereby when the track 15 is mounted upon the chair arm 14, the top surface of the wall 16 of the track 15 will be above the plane of the arm 14, thereby to support the table 29 of the high chair above the chair arms 14.

The slide member 27, like the track 15, is channel-shaped in cross section to provide a top flange 30 which is secured by means of connecting screws 31 to the underside of the table 29. The opposite flange 32 is provided, at its junction with the medial wall 34 of the slide member 27, with slots 35 which extend at right angles with respect to each other. There is struck from the medial wall 34 spaced mounting lugs 36. These mounting lugs 36 are provided with trunnions 37 which extend inwardly toward each other and engage in openings 38 formed in a latch plate 39. This latch plate 39 provides, at opposite end portions, latch fingers 40 which extend substantially at right angles with the medial wall 41 of the latch plate 39, and these latch fingers 40 operate in the slots 35. The latch fingers 40 each provide stop lugs 42 which limit the pivotal movement of the latch plate 39 by action of the spring 43, one end of which is connected as at 44 to the slide member 27 and the opposite end as at 45 to the latch plate 39.

The opposite end portions of the medial wall 34 are flared outwardly as at 46 to facilitate guiding the slide member upon the track 15.

The slots 22 of the track 15 are of a depth such that when the latch fingers 40 engage in these slots, the latch fingers will bear against the flange 17, thereby yieldably urging the top wall 16 of the track against the flange 30 of the slide member 27 to compensate for any relative movement between the table 29 and the arms of the chair 14, which movement may be effected by the child's attempting to rattle the table 29.

In our mounting the adjustable slide device embodying our invention, upon the high chair, the tongues 28 will locate the plane of the top wall 16 of the track 15 with respect to the top of the chair arm 14, and in assembling this track 15 upon the arm 14, it is necessary only to position the track in its proper position with respect to the longitudinal side edge of the arm 14. From this it will be seen that it requires but a simple operation to attach and locate the track upon the arm 14.

After the track and slide member have been attached to their respective elements of the high chair, to-wit, the arm 14 and the table 29, in mounting the table 29 upon the arms, the slide member is telescoped over the track, this telescopic movement being aided by the beveled end portions 25 and 46 of the track and slide member, respectively. As the slide member is moved longitudinally of the track to adjust the table upon the arms 14, the leading latch finger 40 will engage the cam edge 21, which engagement will, when the table 29 is moved relative to the arms 14, automatically pivot the latch plate 39 from an unlatched position where such plate will be held until the latch fingers engage in any pair of the slots of the track.

Assuming that there is a sufficient space between the inner edge of the table 29, as indicated at 29', and the back 12 of the chair, it will be obvious that when the chair is unoccupied, the

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attendant may remove the table 29 by movement of the table in a forward or rearward direction relative to the arms of the high chair. With the latch fingers 40 engaged in a pair of the slots 22, by action of the spring 43 any relative movement between the slide member and the track in an upward direction will be transposed to the latch plate 39 and by virtue of the yieldable connection thereof with the slide member, this movement will be resisted by the spring 43 for reasons hereinbefore stated.

To remove the table 29, the attendant places both hands upon the opposite side edge portions 30' of the table with the fingers of the hands in engagement with the latch plate 39. By firmly grasping the edge portions 30' of the table 29 and by slightly compressing the hand, the fingers will be caused to pivot the latch plate 39 against the action of the spring 43 to position to disengage the latch fingers 40 from the slots 22 into which they engage. The table then can be readily removed. From the description herein, it will be apparent that our improved adjustable slide device comprising few parts and that the parts are so arranged and designed as to permit assembly of the device on either the right of left-hand side of the table, thereby eliminating the necessity of right-hand and left-hand parts.

While we have illustrated and described the preferred form of construction for carrying our invention into effect, this is capable of variation and modification without departing from the spirit of the invention. We, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail ourselves of such variations and modifications as come within the scope of the appended claims.

Having thus described our invention, what we claim as new and desire to protect by Letters Patent is:

1. An adjustable slide device comprising a track member formed substantially channel-shaped in cross section and having an attaching flange adapted to be attached to the arm of a chair or the like and having a free flange opposite to the attaching flange provided with a plurality of spaced slots, a slide member likewise formed channel-shaped in cross section for telescopic relation with said track member and having an attaching flange adapted to be attached to the underside of a table or the like and having spaced slots formed in a free flange opposite said first-named flange of said slide member, the medial wall of said slide member being provided with spaced trunnions, a latch plate having at opposite end portions parallel spaced latch fingers extending through the slots of said free flange of said slide member and adapted to have latched engagement in a pair of the slots of said track member and provided with openings into which said trunnions project, and spring means connected to said latch plate and said slide member for urging said latch fingers into latched engagement in the slots of said track member.

2. An adjustable slide device comprising a track member formed substantially channel-shaped in cross section and having an attaching flange adapted to be attached to the arm of a chair or the like and having a free flange opposite to the attaching flange provided with a plurality of spaced slots, a slide member likewise formed channel-shaped in cross section for telescopic relation with said track member and having an attaching flange adapted to be attached to the

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underside of a table or the like and having spaced slots formed in a free flange opposite said first-named flange of said slide member, the medial wall of said slide member being provided with spaced trunnions, a latch plate having at opposite end portions parallel spaced latch fingers extending through the slots of said free flange of said slide member and adapted to have latched engagement in a pair of the slots of said track member and provided with openings into which said trunnions project, and spring means connected to said latch plate and said slide member for urging said latch fingers into latched engagement in the slots of said track member, said spring means bearing said latch fingers against the base of the slots of said track member for yieldably urging said track member upwardly against the attaching flange of said slide member.

3. An adjustable slide device comprising a track member formed substantially channel-shaped in cross section and having an attaching flange adapted to be attached to the arm of a chair or the like and having a free flange opposite to the attaching flange provided with a plurality of spaced slots, a slide member likewise formed channel-shaped in cross section for telescopic relation with said track member and having an attaching flange adapted to be attached to the underside of a table or the like and having spaced slots formed in a free flange opposite said first-named flange of said slide member, the medial

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wall of said slide member being provided with spaced trunnions, a latch plate having at opposite end portions parallel spaced latch fingers extending through the slots of said free flange of said slide member and adapted to have latched engagement in a pair of the slots of said track member and provided with openings into which said trunnions project, spring means connected to said latch plate and said slide member for urging said latch fingers into latched engagement in the slots of said track member, said spring means bearing said latch fingers against the base of the slots of said track member for yieldably urging said track member upwardly against the attaching flange of said slide member, and stop members on said latch plate for limiting pivotal movement of said latch plate in latch-engaging direction in said slots of said track member.

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