March 27, 1962 L. GOTTFRIED ET AL 3,027,202

ATTACHMENT FOR CHAIRS AND SIMILAR STRUCTURES

Filed Jan. 12, 1961

FIG. 1.

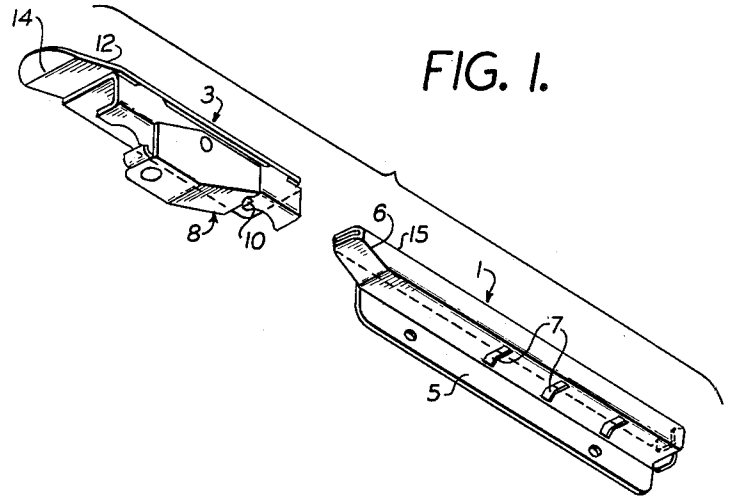


FIG. 2.

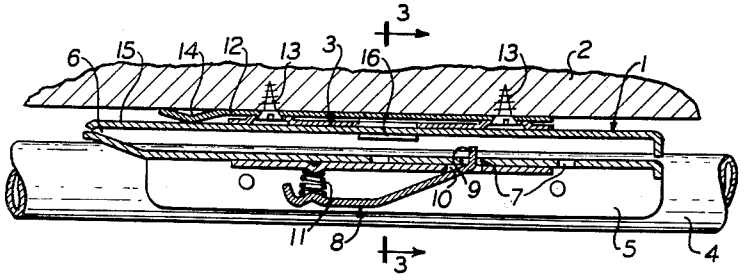


FIG. 3.

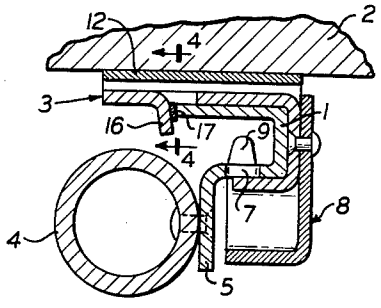
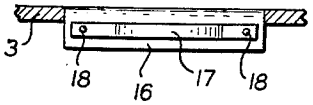


FIG. 4.



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3,027,202
ATTACHMENT FOR CHAIRS AND SIMILAR STRUCTURES

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1 Claim. (Cl. 308—3.6)

The present invention relates to an attachment for chairs and similar structures, as for instance high-chairs or children's chairs, lounging chairs, or the like, where it is desirable to connect and remove, respectively, such attachment at will.

In order to provide the possibility for easy removal or attachment of a tray on a high-chair, connecting means have been proposed before which are disclosed in United States Patent No. 2,440,224. It has been found, however, that this known connecting device is operative only when two such connecting devices are used which are secured to the tray. If a single device would be used to support for instance an arm support, the structure taught by said patent could not be used, since this structure lacks any means for avoiding any lateral or side movement of the arm support relative to the side arm of the chair. It has been further found that this known device does not function satisfactorily for the purpose of the present invention, because unless it is manufactured by rather expensive manufacturing processes, a wabbling of the arm support on the side arm of the chair is unavoidable.

It is, therefore, one object of the present invention to improve the said known connecting device in such manner that the mentioned drawbacks are completely eliminated.

It is also an object of the present invention to provide an attachment for chairs or the like which permits of application as a single device.

It is another object of the present invention to provide a connecting device for an attachment or the like to the side arms of a chair, which device substantially comprises a track member and a slide member, said slide member being provided with an attaching flange and with a beveled end and having intermediate its ends latch receiving openings, to receive a latch member of angular shape which is pivoted on the vertical wall of said slide member and is provided with a portion which has an upwardly projecting detent extending through the opening in the side member and engaging the track openings, whereby as a further improvement in accordance with the present invention at least one projection is provided to extend from the upper plate of the slide member downwardly and which projection carries a spring blade to function as abutment means against any lateral or side movement of the track member relative to the slide member.

It is yet another object of the present invention to provide a connecting device for an attachment or the like to the side arms of a chair, which device substantially comprises a track member and a slide member, said slide member being provided with an attaching flange and with a beveled end and having intermediate its ends latch receiving openings, to receive a latch member of angular shape which is pivoted on the vertical wall of said slide member and is provided with a portion which has an upwardly projecting detent extending through the opening in the slide member and engaging the track openings, whereby as a further improvement in accordance with the present invention a spring blade is disposed below the slide member, which spring blade has an upturned end to engage the opposite face of the track member in order to bias the latter into immovable position relative to the slide member.

With these and other objects in view, which will become apparent in the following detailed description, the present

invention will be clearly understood in connection with the accompanying drawing, in which:

FIGURE 1 is a perspective, exploded bottom view of the connecting device;

FIG. 2 is a longitudinal section thereof in engaging position of these two members;

FIG. 3 is a section along the lines 3—3 of FIG. 2; and

FIG. 4 is a section along the lines 4—4 of FIG. 3.

Referring now to the drawing, the connecting device comprises a track member 1 properly secured to the side arm 4 of a chair (not shown) or any other article, and a slide member 3 properly secured to an attachment 2 of a chair (not shown). The track member 1 is provided with an attaching flange 5 and with a beveled end 6 and has intermediate its ends latch receiving openings 7.

The slide member 3 is preferably of channel shape. A latch member 8 of angular shape is pivoted on the vertical wall of the slide member 3 and provided with a portion which has an upwardly projecting detent 9 which is adapted to extend through the opening 10 provided in the slide member 3 and to engage one of the track openings 7. A spring 11 is interposed between the latch member 8 and the lower wall of the slide member 3, whereby the latch member 8 is biased into track engaging position.

In order to prevent a lateral or side movement of the track member 1 in its engaging position with the slide member 3 without interfering with the longitudinal movement thereof, particular means are provided which permit a free longitudinal movement only of the track member 1 relative to the slide member 3, while relative side movement is prevented. Any suitable means may be used to achieve this end, yet a preferred embodiment of such means is shown in the drawing by providing a projection 16 extending downwardly and a spring blade 17 is secured to the lateral face of the projection 16 by rivets 18 or any other suitable means from the upper plate of the slide member 3, which spring blade 17 engages the end edge of the upper plate of the track member 1 and thus functions as abutment means against any lateral or side movement of the track member 1 relative to the slide member 3.

In order to prevent additionally any wabbling of the attachment on the side arm of the chair, another spring blade 12 is provided between the base portion of the slide member 3 and the attachment 2, which spring blade may be secured to the bottom face of the attachment 2 by means of screws 13 or the like, simultaneously with the securing of the slide member 3 thereto. One end of the spring blade 12 has a downwardly bent portion 14 which is adapted to engage the top face 15 of the track member 1, thereby pushing the front portion of the track member in downward direction and thus preventing any wabbling or turning movement of the track member 1 on the slide member 3.

While we have disclosed one embodiment of the present invention, it is to be understood that this embodiment is given by example only and not in a limiting sense, the scope of the present invention being determined by the objects and claim.

We claim:

In a connecting device for a member supported by a chair having at least one side arm, a track member and a slide member, said track member adapted to be secured to said side arm, and said slide member adapted to be secured to said supported member, said track member having an upper plate and a flange integrally projecting therefrom and constituting means for securing said track member to said side arm, said track member terminating at one end into an outwardly projecting body beveled at one end, said track member having abutment means at the other end and latch receiving openings intermediate its ends, said slide member being of channel shape including

a vertical wall and an upper wall, the latter being adapted for attachment to the bottom of said supported member, a latch member of angular shape pivoted on said vertical wall of said slide member and provided with a portion underlying said outwardly projecting body having an upwardly projecting detent adapted to extend through an opening in said slide member and to engage selectively one of said latch receiving track openings, and a spring interposed between said latch member and the lower wall of said slide member, whereby said latch is biased into track engaging position, said upper wall of said slide member having a downwardly extending projection, and a spring blade secured to the lateral face of said projection opposite the longitudinal end edge of said upper plate of said track member, and an additional spring interposed between said supported member and the top face of said

track member, in order to bring about a tight seat of said slide member in said track member, said additional spring comprising a spring blade disposed between said supported member and the top face of said slide member and secured to said supported member with said slide member, and said spring blade having a bent out portion adapted to engage the top face of said track member.

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